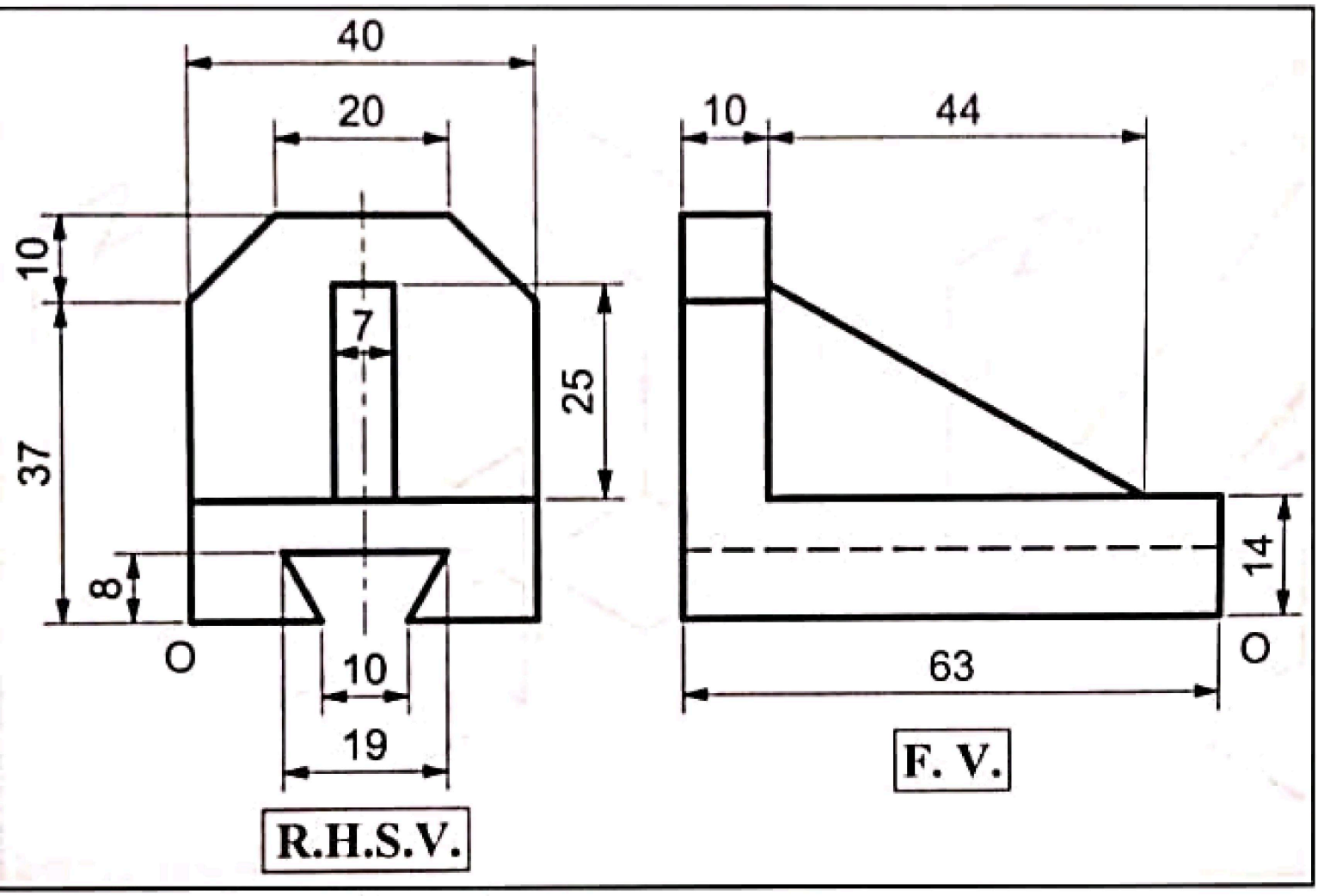
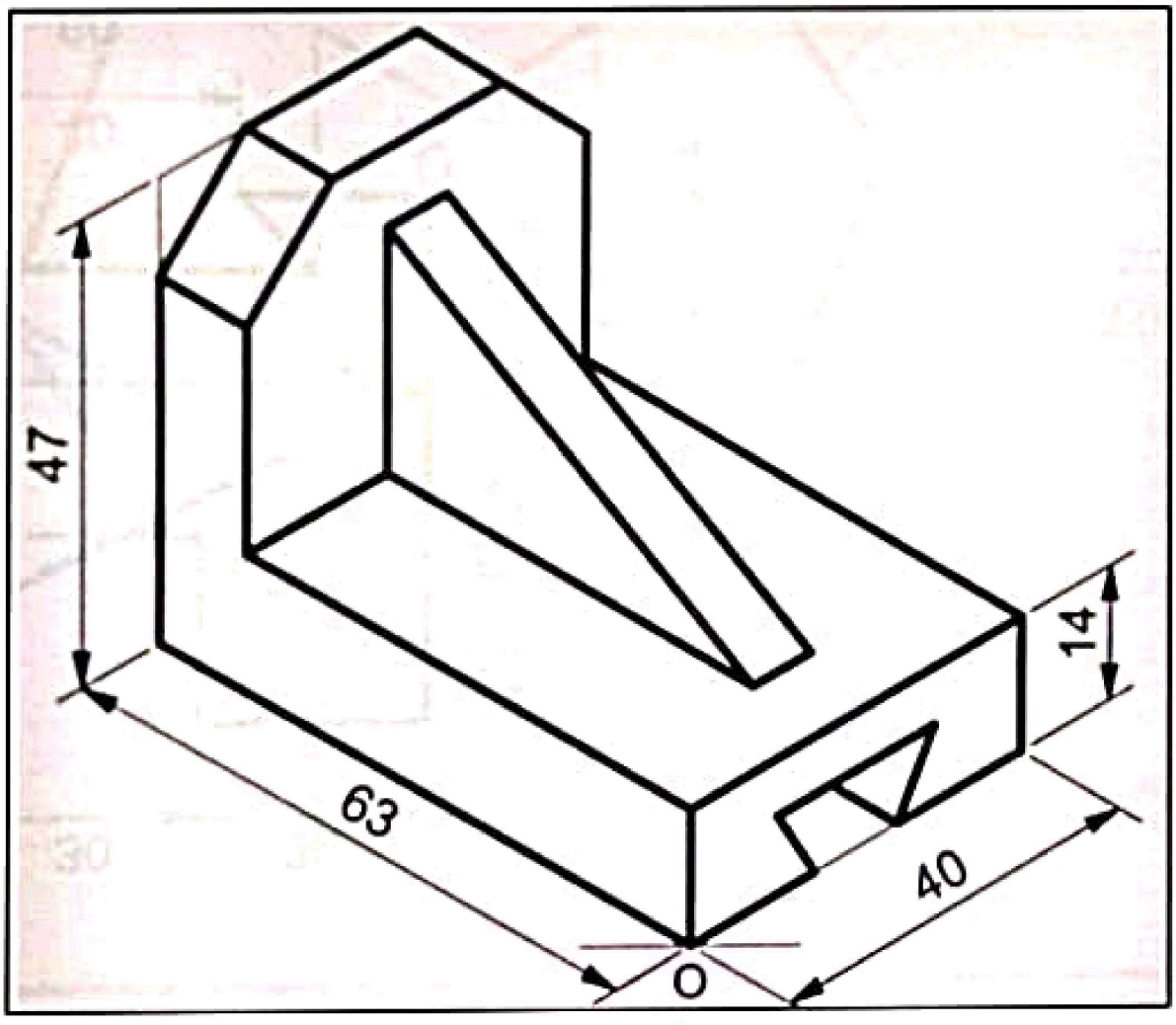
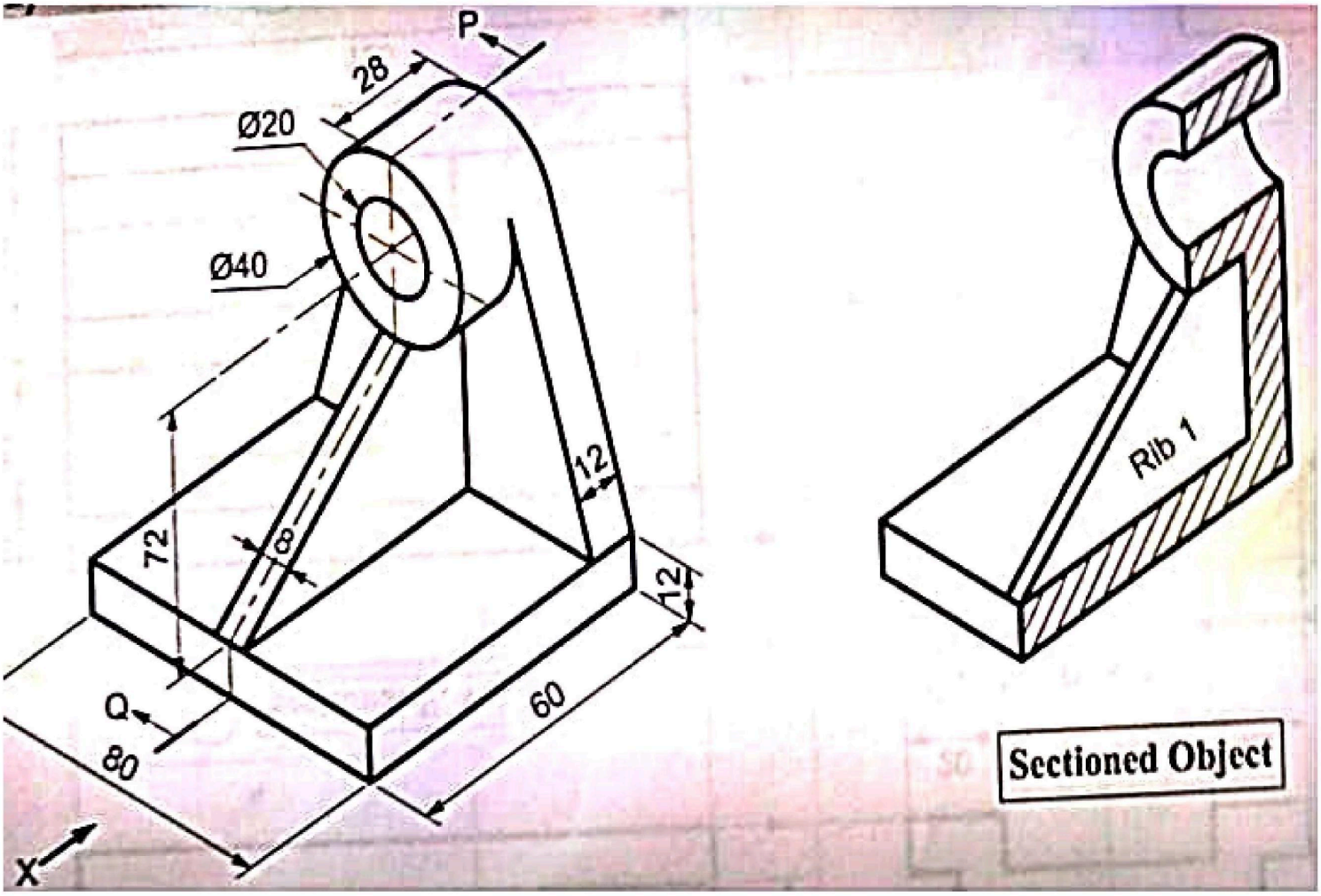
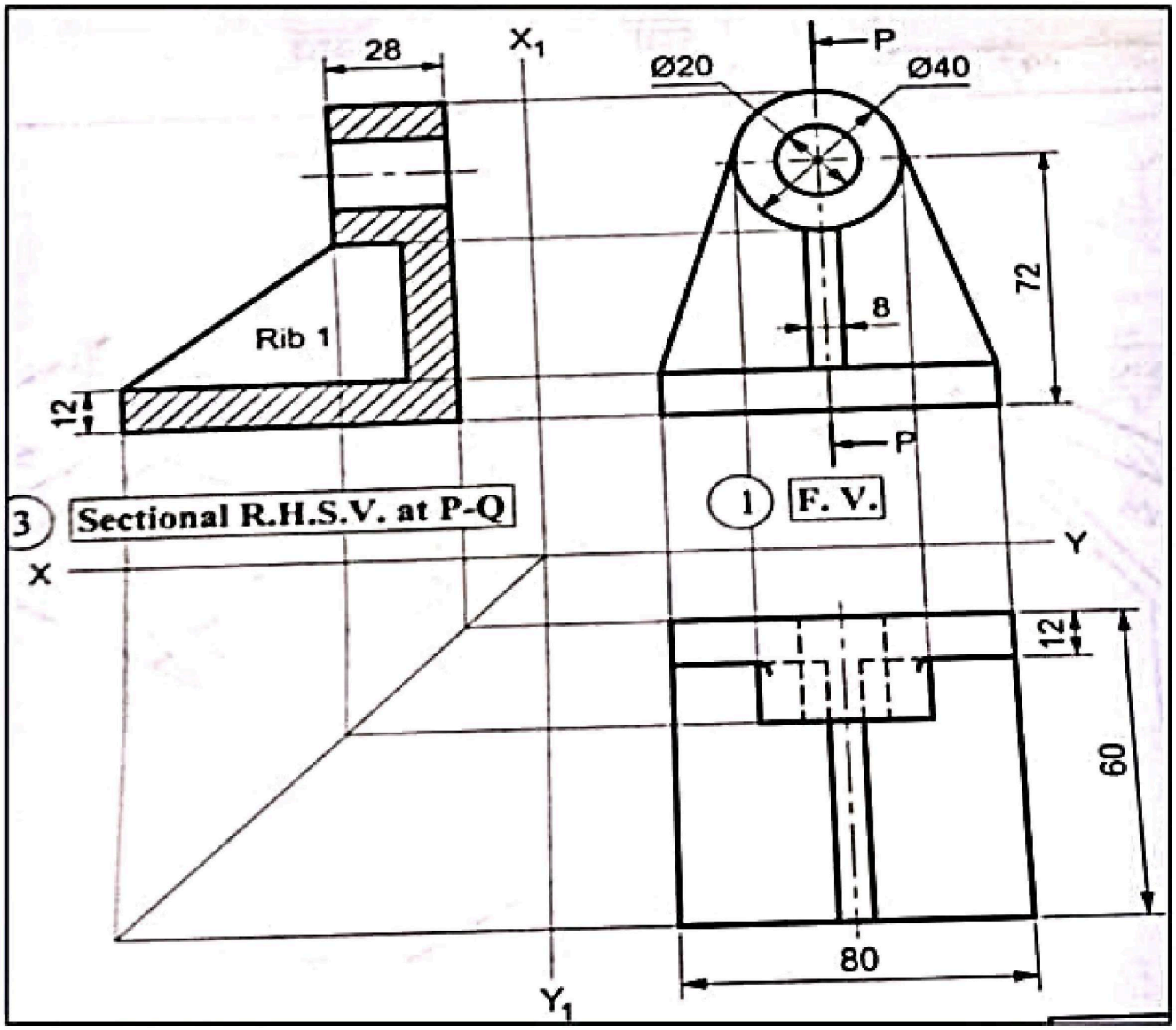
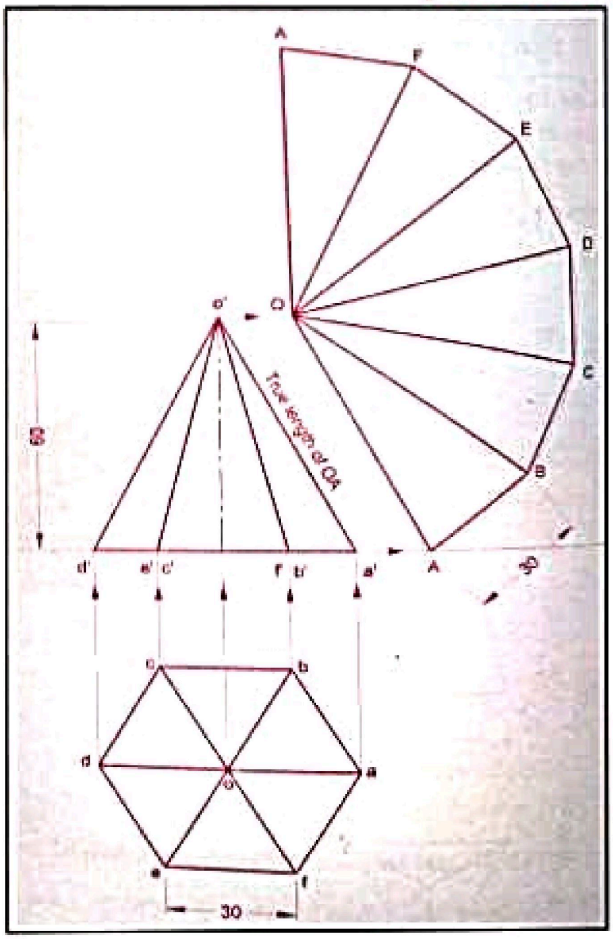

40
20
10
7
25
37
8
O
10
19
R.H.S.V.
10
44
14
O
63
F. V.


47
14
63
40
O

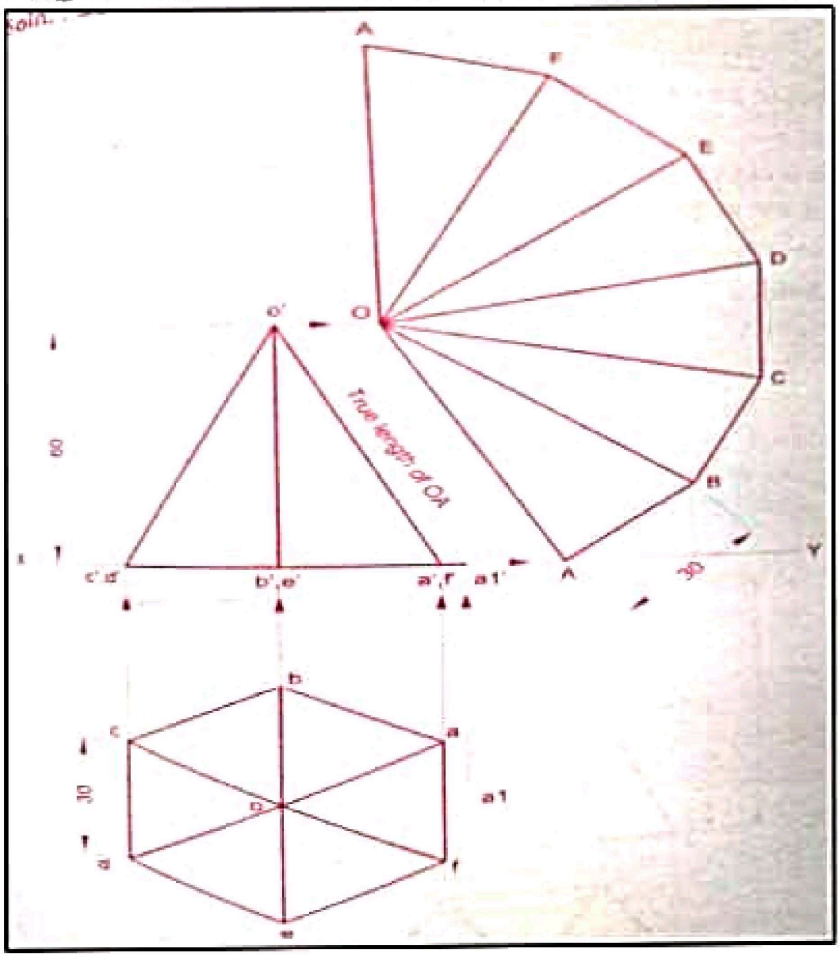

P
28
Ø20
Ø40
72
8
12
12
60
Q
80
X
Rib 1
Sectioned Object


28
X1
Ø20
P
Ø40
72
8
Rib 1
12
P
3 Sectional R.H.S.V. at P-Q
1 F. V.
X
Y
12
60
80
Y1

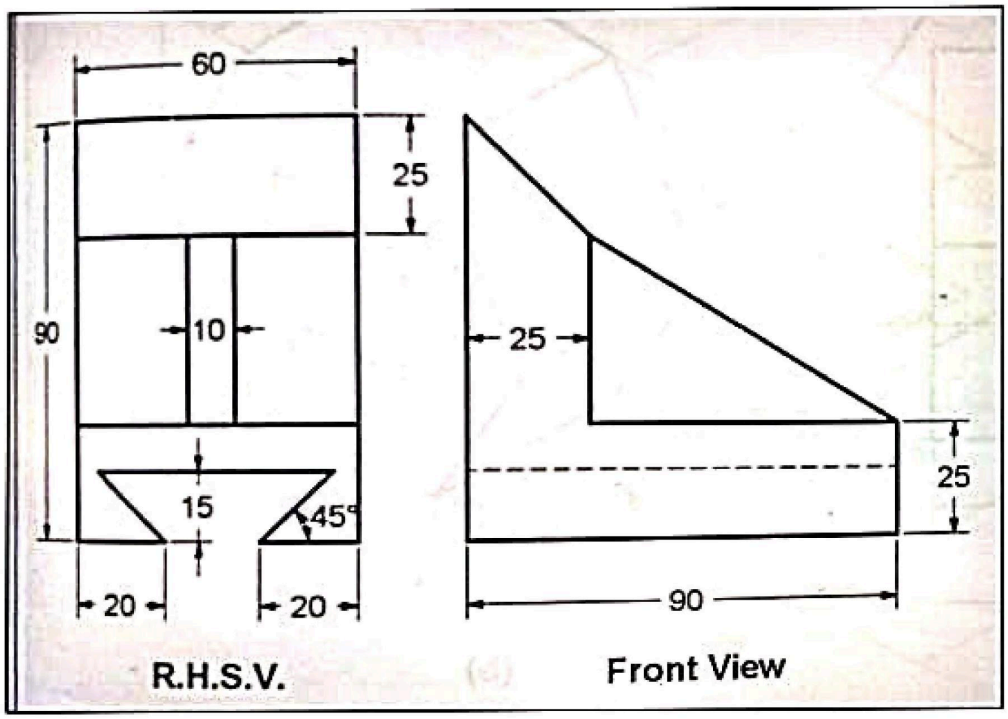
6. Draw the development of lateral surface of Hexagonal pyramid of base 30 mm & axis height 60 mm when one side of base is ***parallel to VP.***

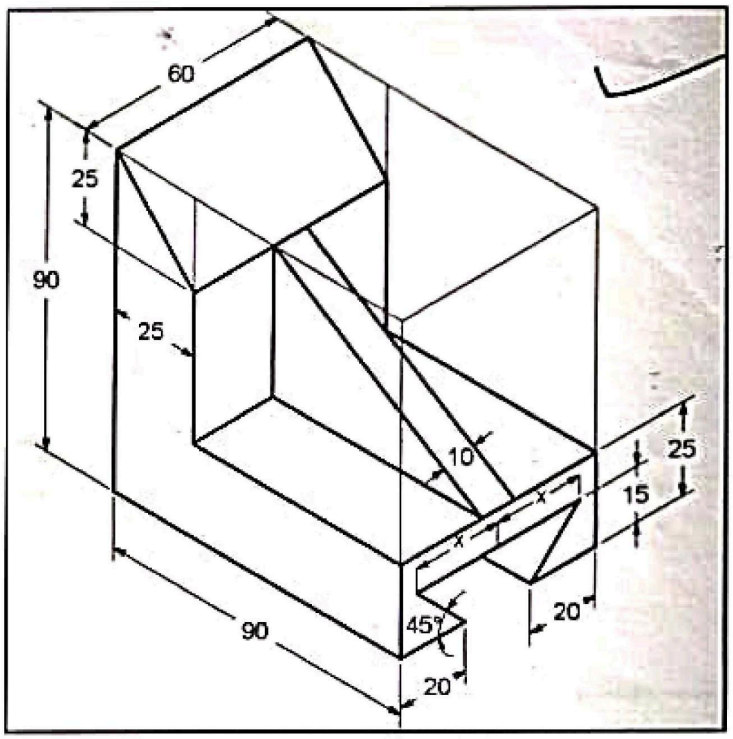


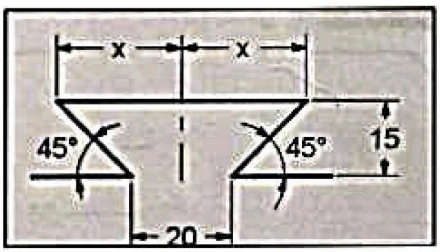
7. Draw the development of lateral surface of Hexagonal pyramid of base 30 mm & axis height 60 mm when one side of base is ***perpendicular to VP.***



Problem No. 11



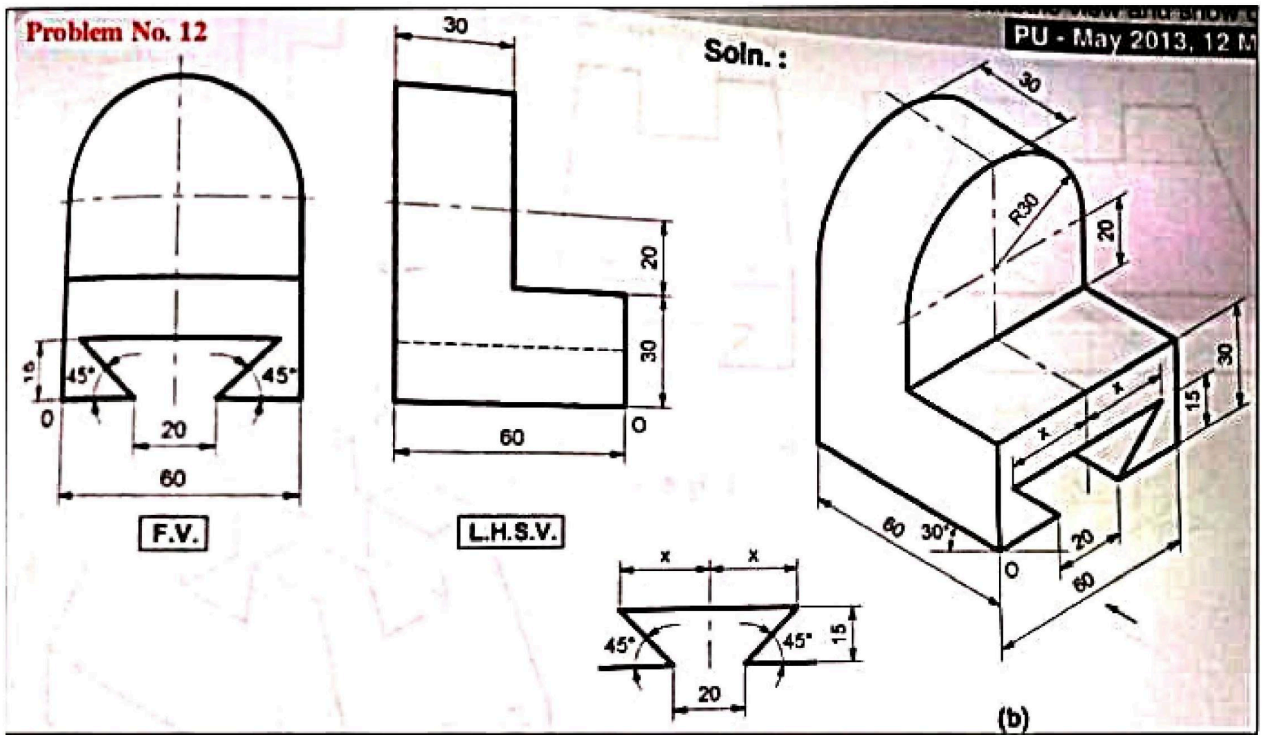




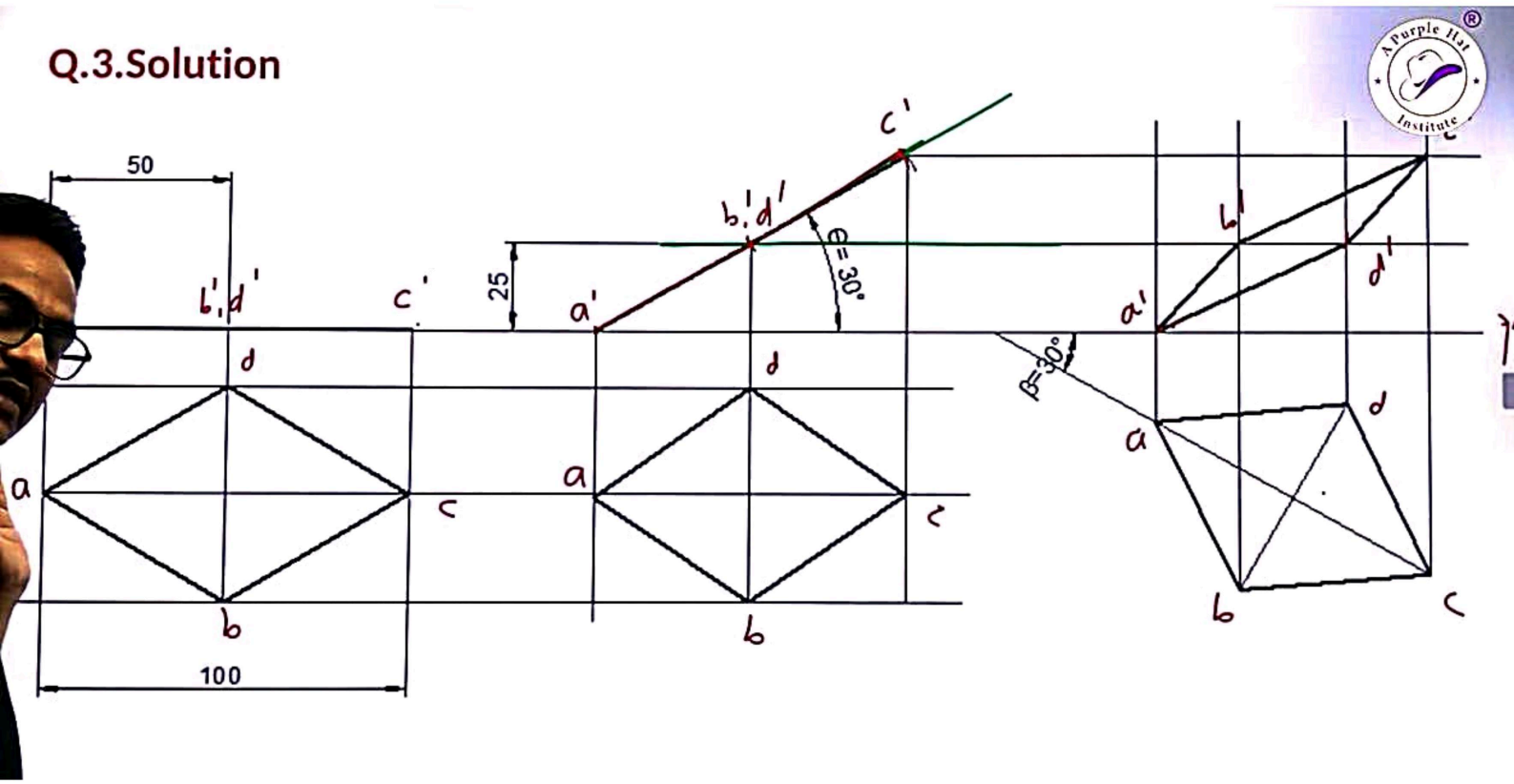
Problem No. 12

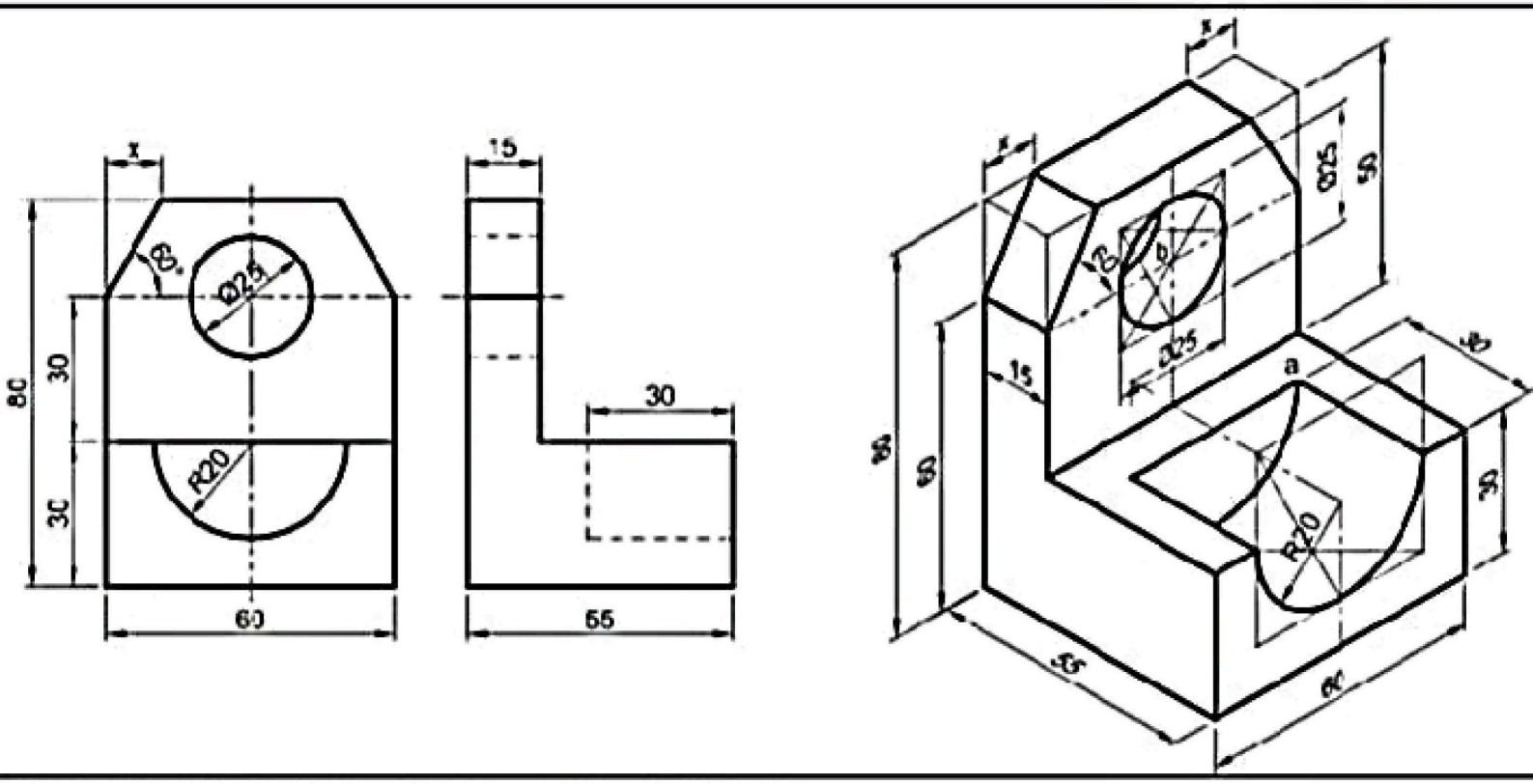
Soln. :

PU - May 2013, 12 M

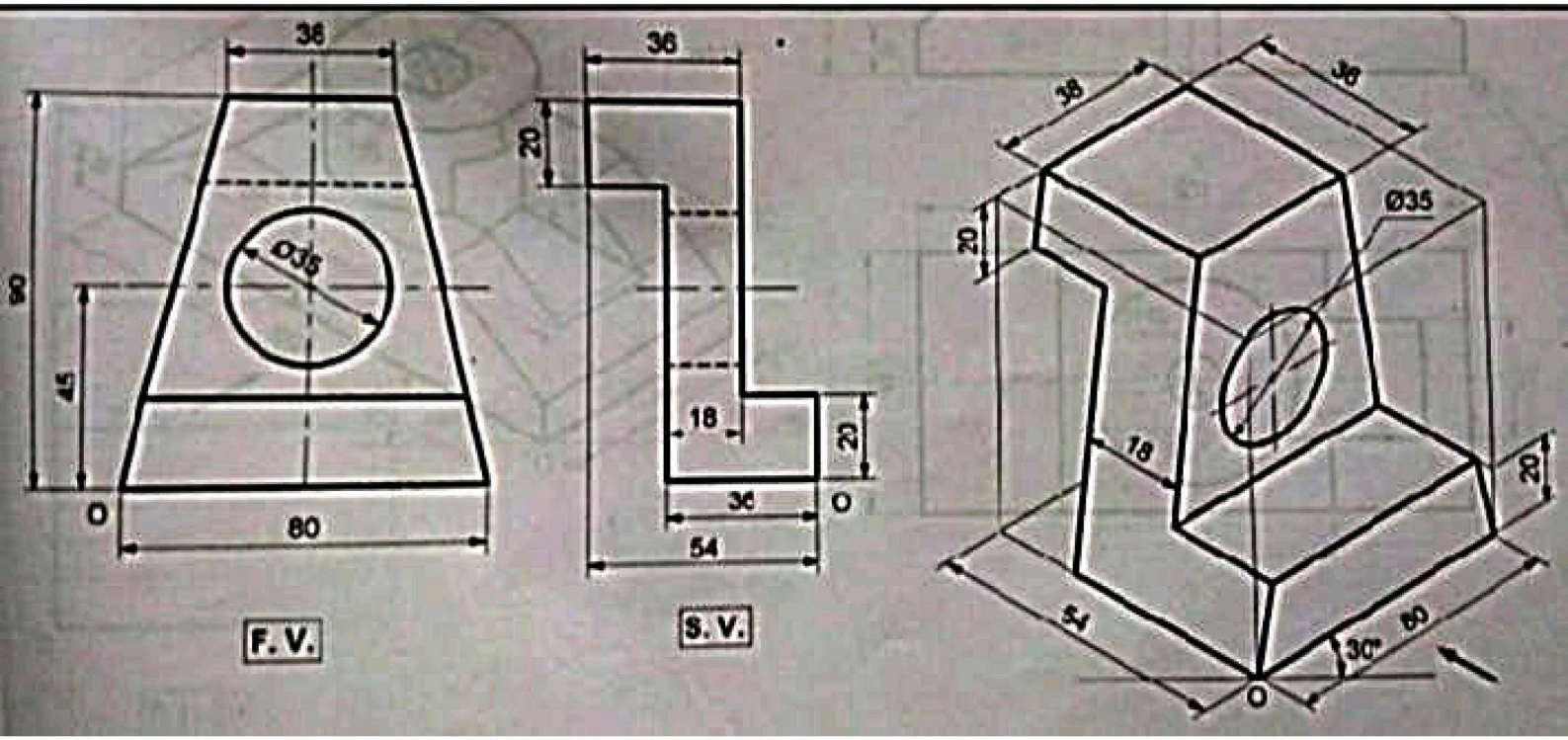


Q.3.Solution





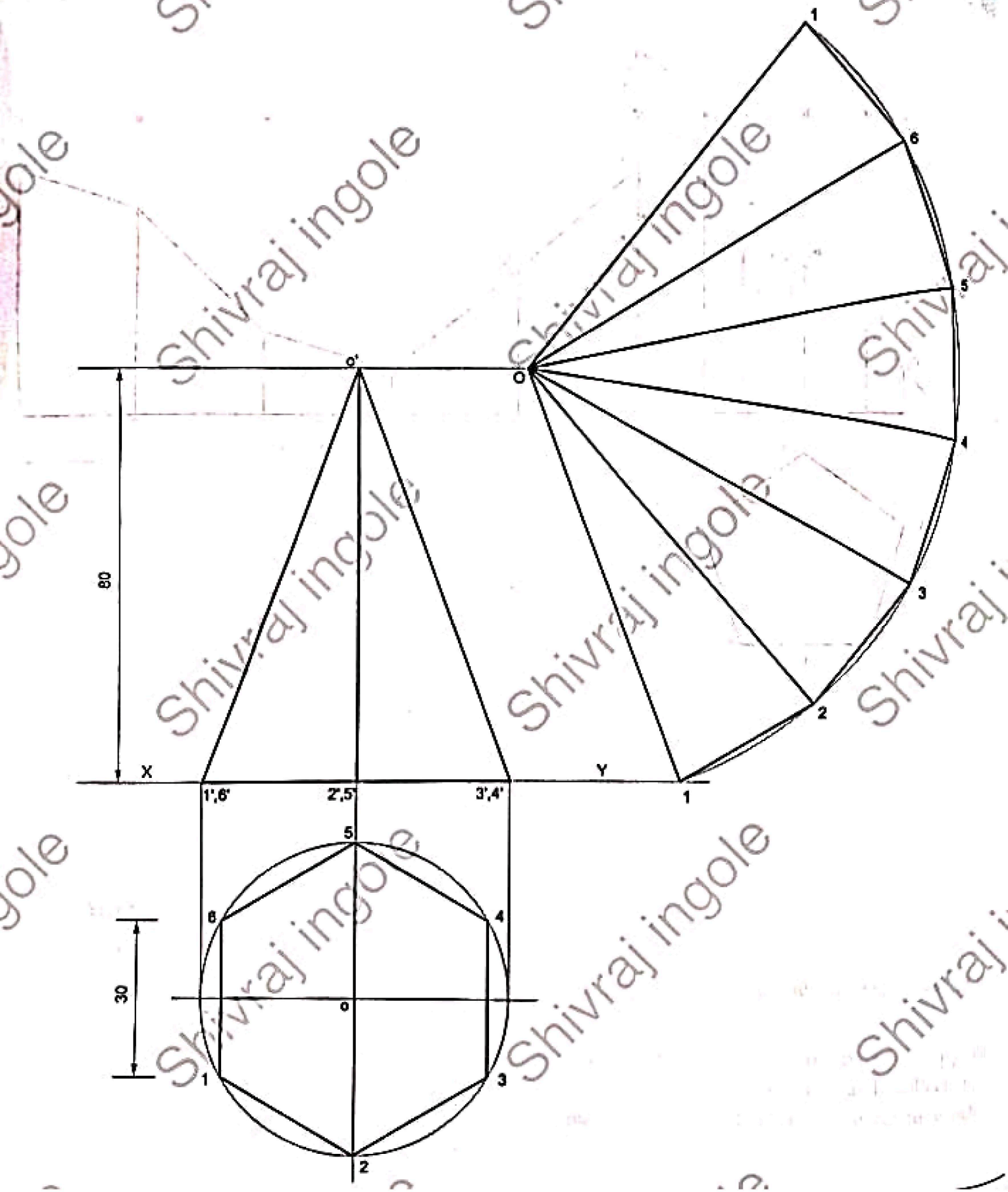
17. Figure show FV & SV of an object. Draw its isometric view using natural scale.



Ex. 3.10.8 : Draw the development of lateral surface of a hexagonal pyramid having base edge 30 mm, axis height 80 mm, is kept on HP in such a way that one of its base edges is perpendicular to VP.

SPPU : Dec.-23, Marks 11

Sol. :



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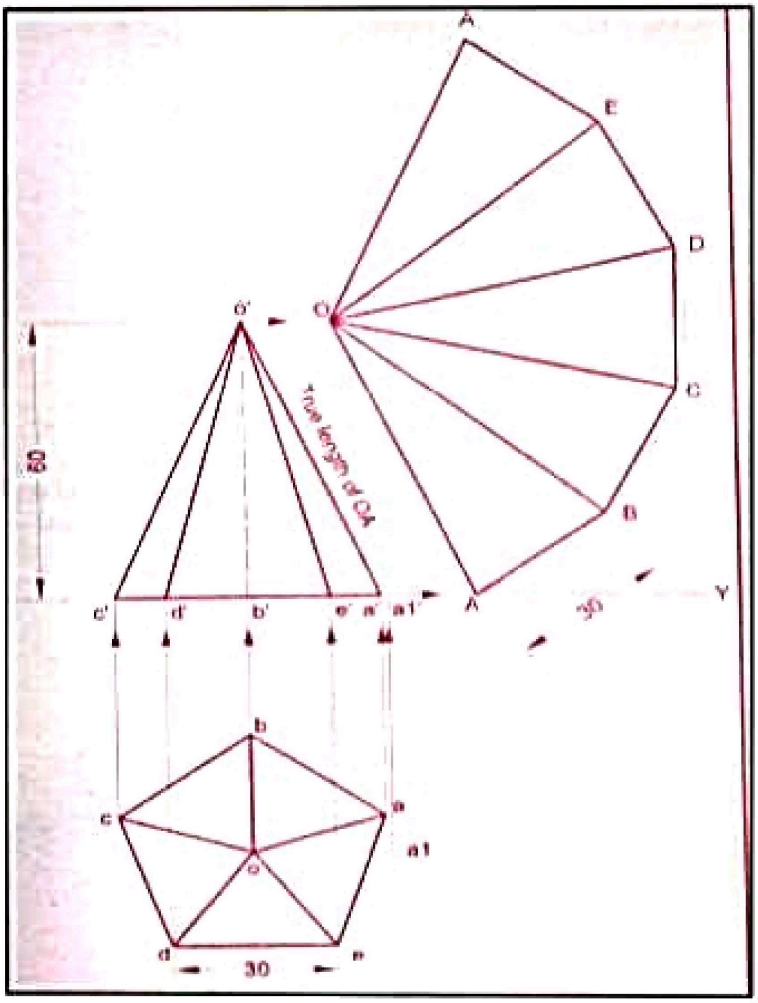
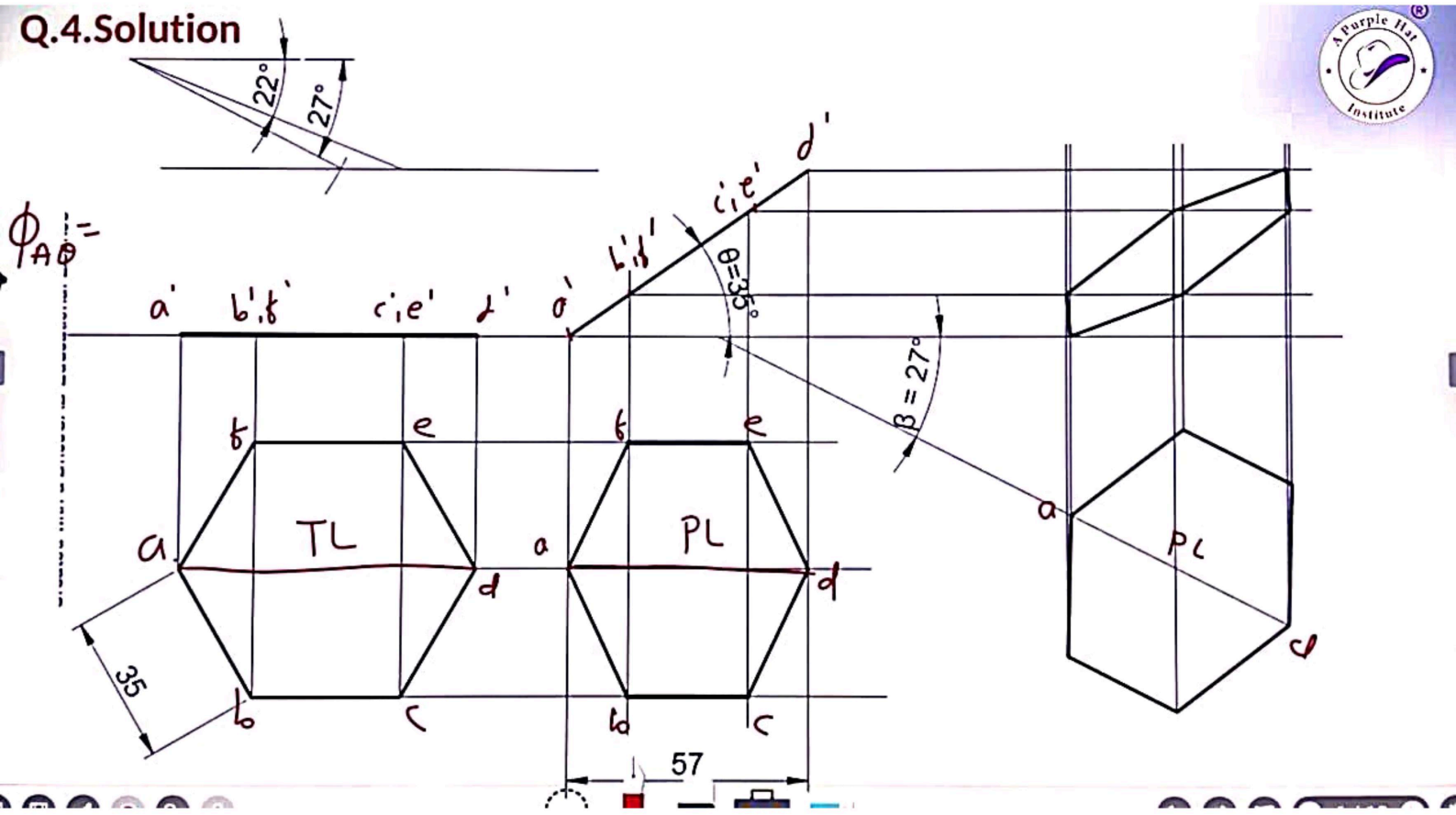
9. Draw the development of lateral surface of pentagonal pyramid of base 30 mm & axis height 60 mm when one side of base is ***parallel to VP & nearest to observer.***



Q.4.Solution


22°
27°
ϕ_{AB} =
a'
b',f'
c',e'
d'
a'
L',f'
c',e'
d'
θ=35°
β = 27°
f
e
f
e
a
TL
a
PL
a
PL
d
d
d
35
b
c
b
c
57

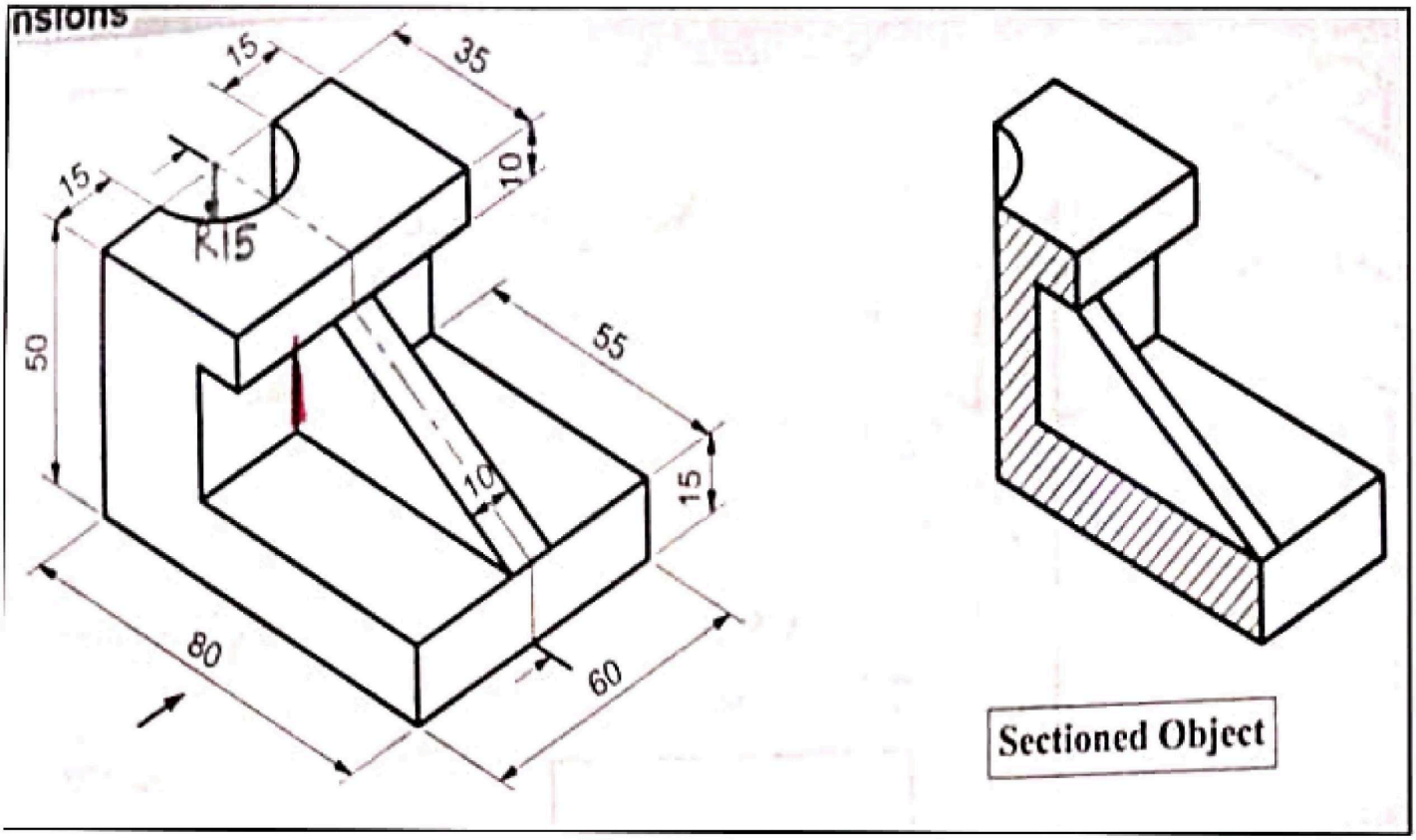
Problem 2.

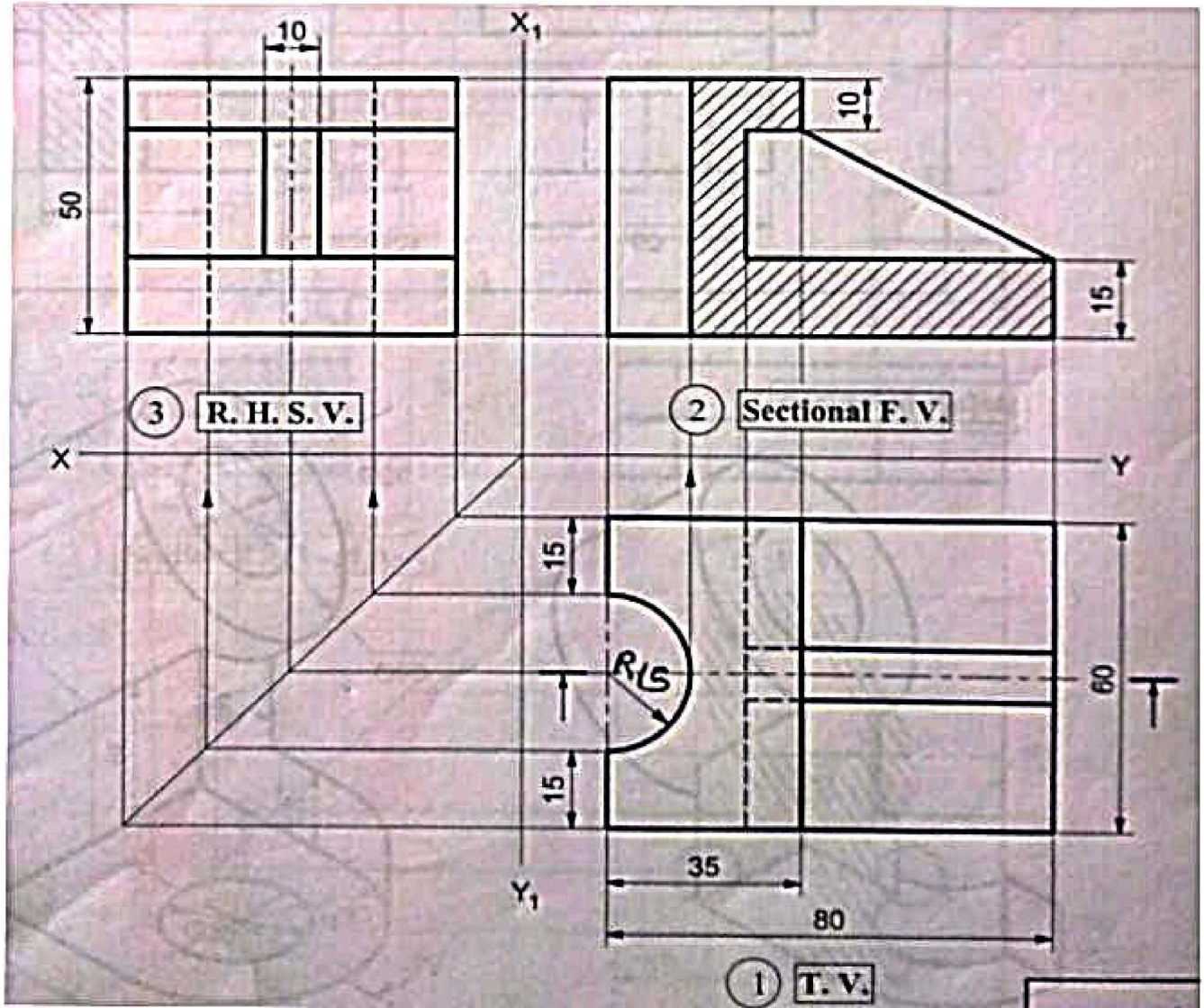
Figure show a pictorial view of an object. By using first angle method of projection, draw

i) Sectional front view, along symmetry of object

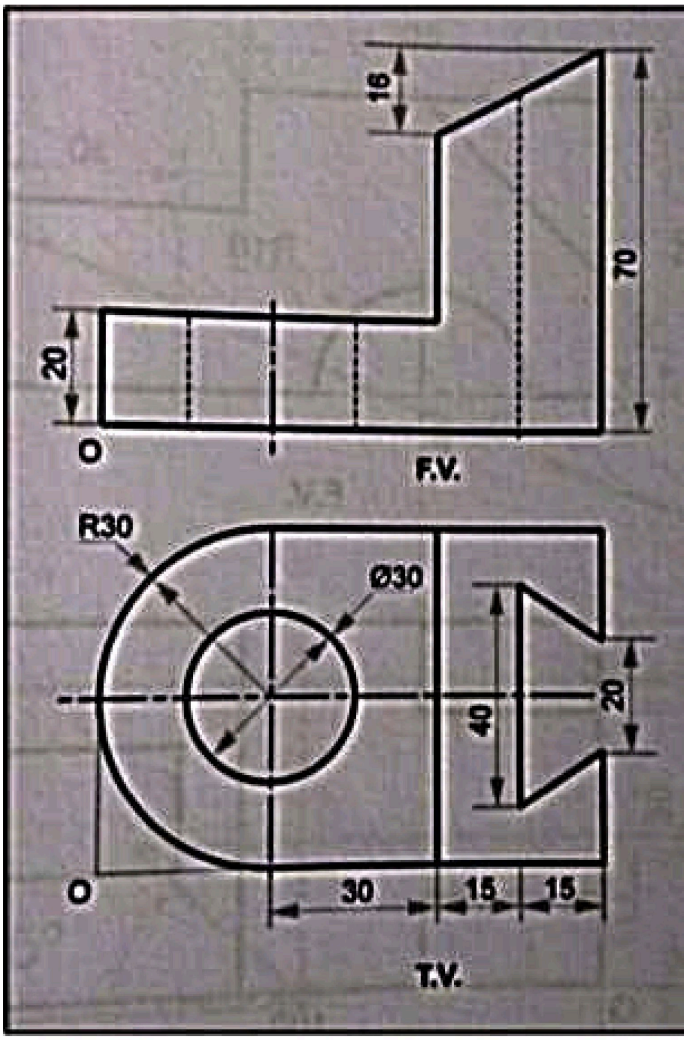
ii) R.H.S.V. (Right Hand Side View)

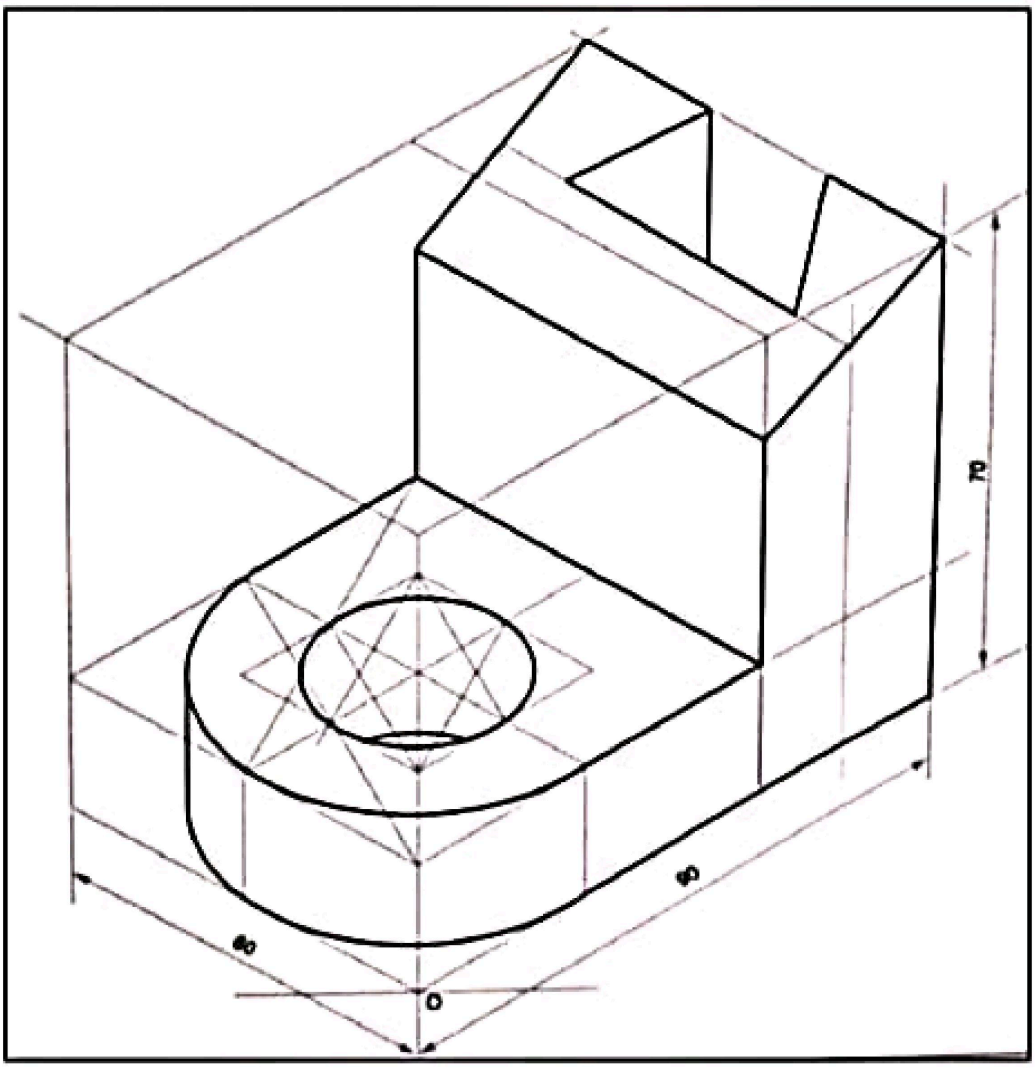
iii) T.V. (Top View)





9. Figure show FV & TV of an object. Draw its Isometric view.





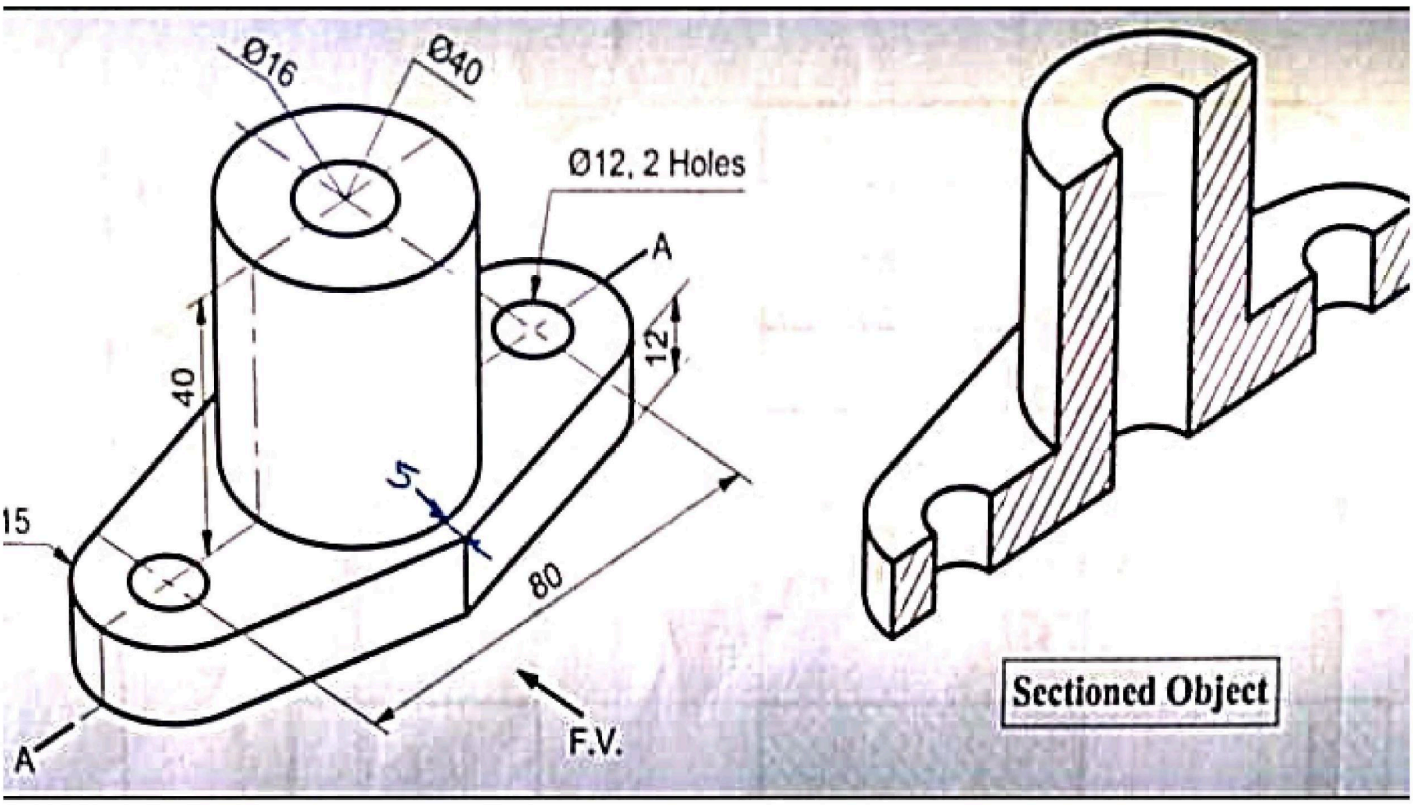
Problem 3.

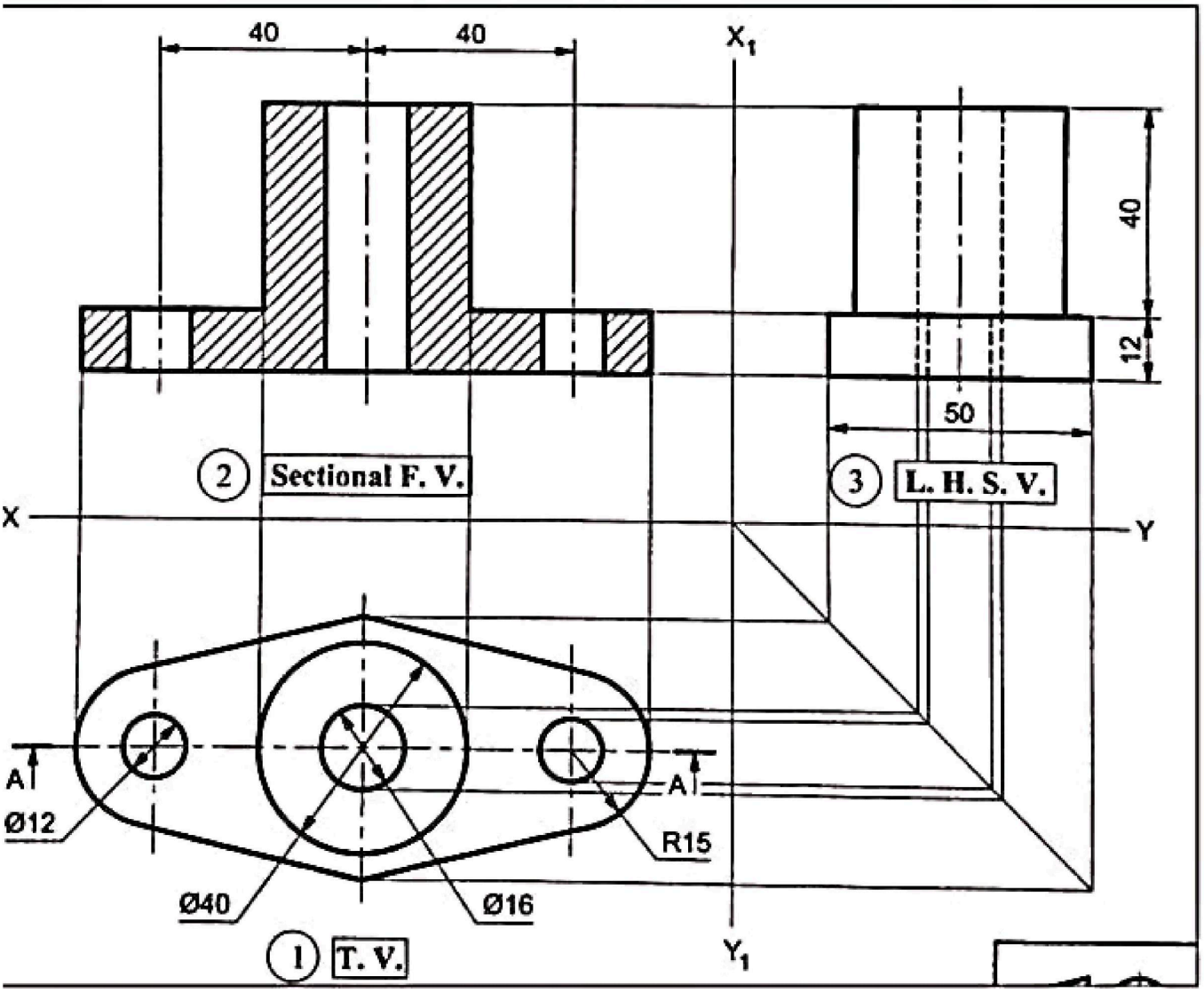
Figure show a pictorial view of an object. By using first angle method of projection, draw

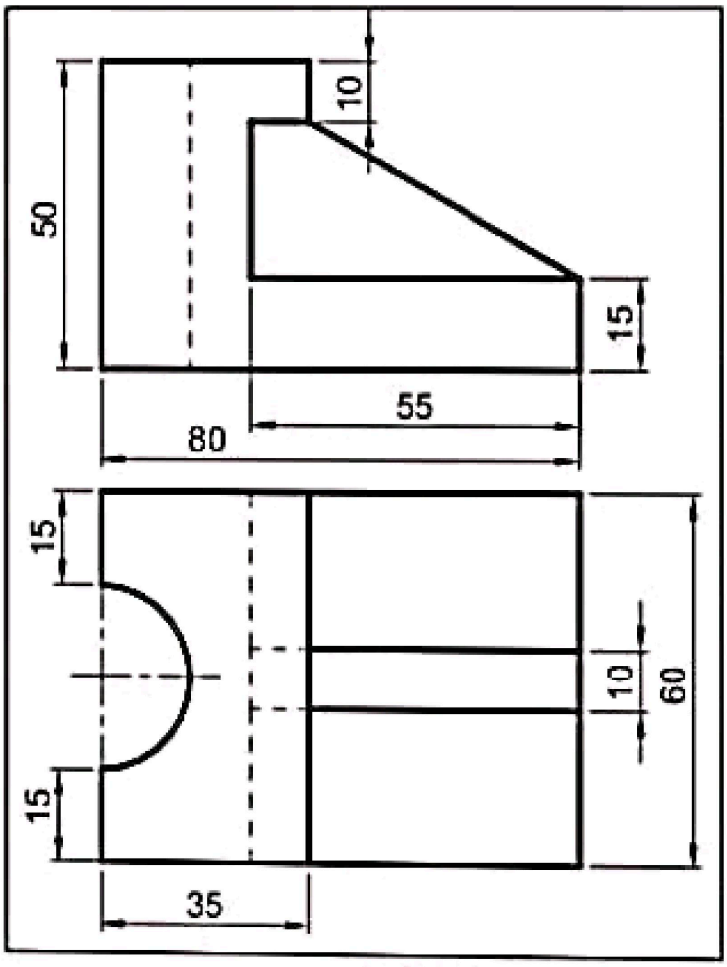
i) Sectional front view, along cutting plane line A-A

ii) L.H.S.V. (Left Hand Side View)

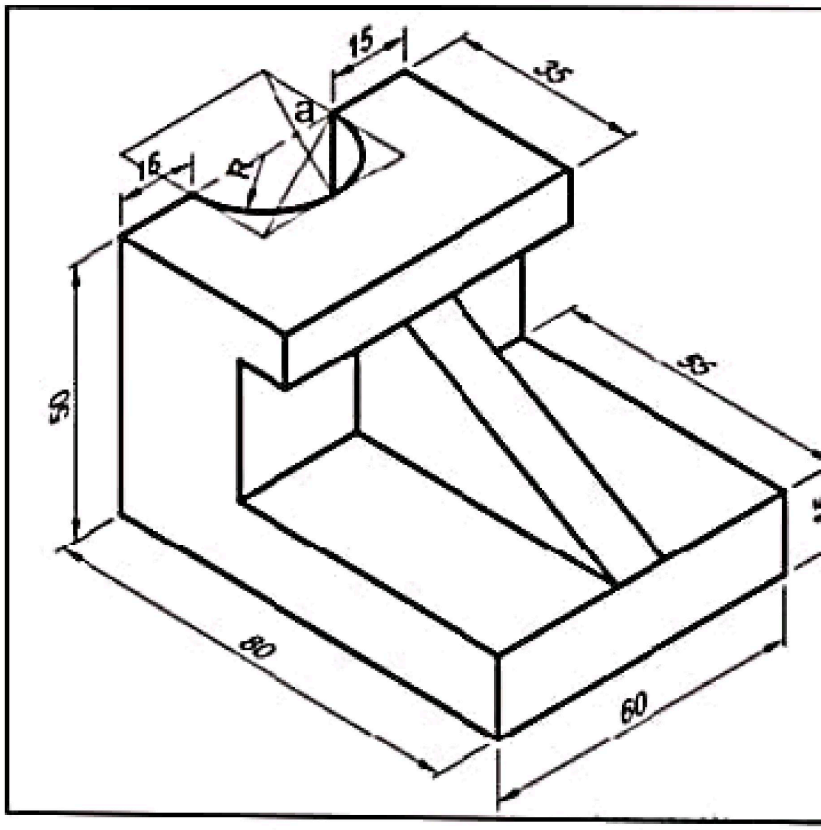
iii) T.V. (Top View)



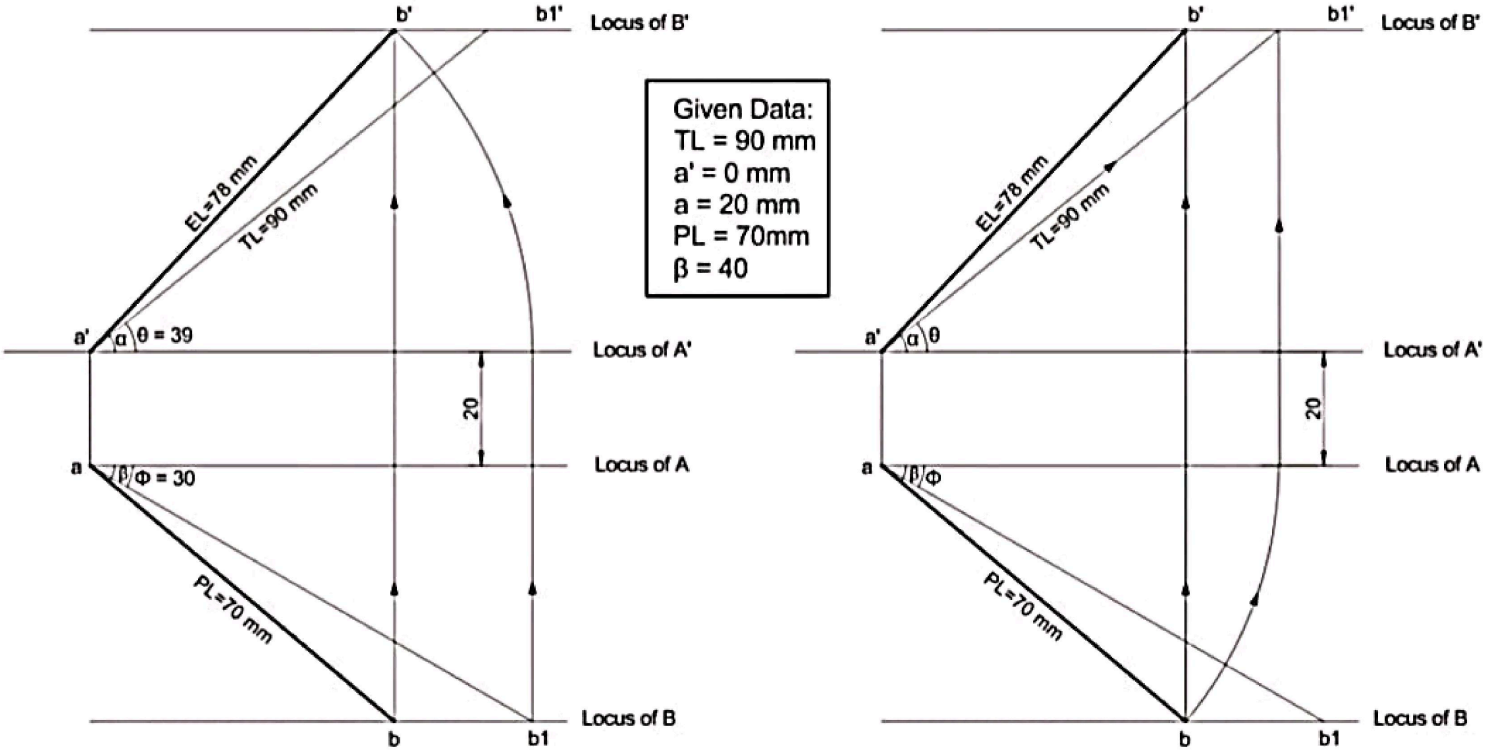




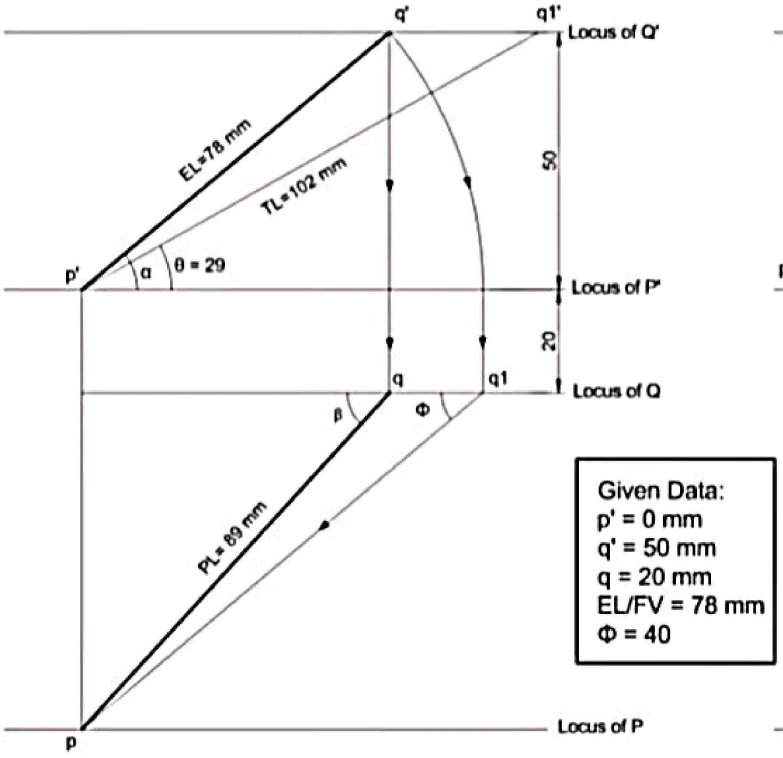
Problem No. 10



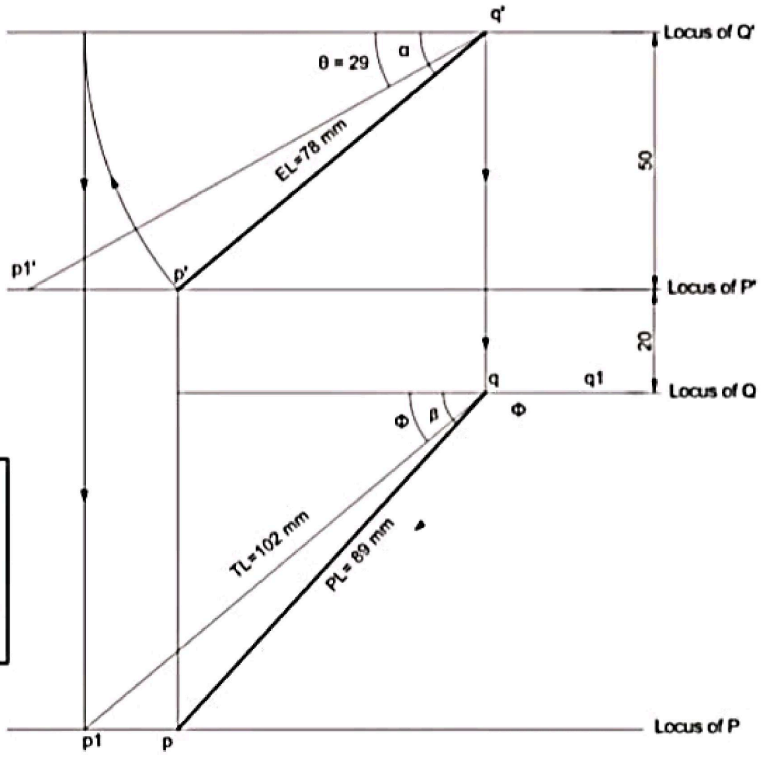
Q.1) MARKING : PLOTING GIVEN DATA **(2M)** + EL & TL IN FV **(4M)** + EL & TL IN TV **(4M)** + DIMENSIONS **(1M)** + LINEWORK **(1M)**



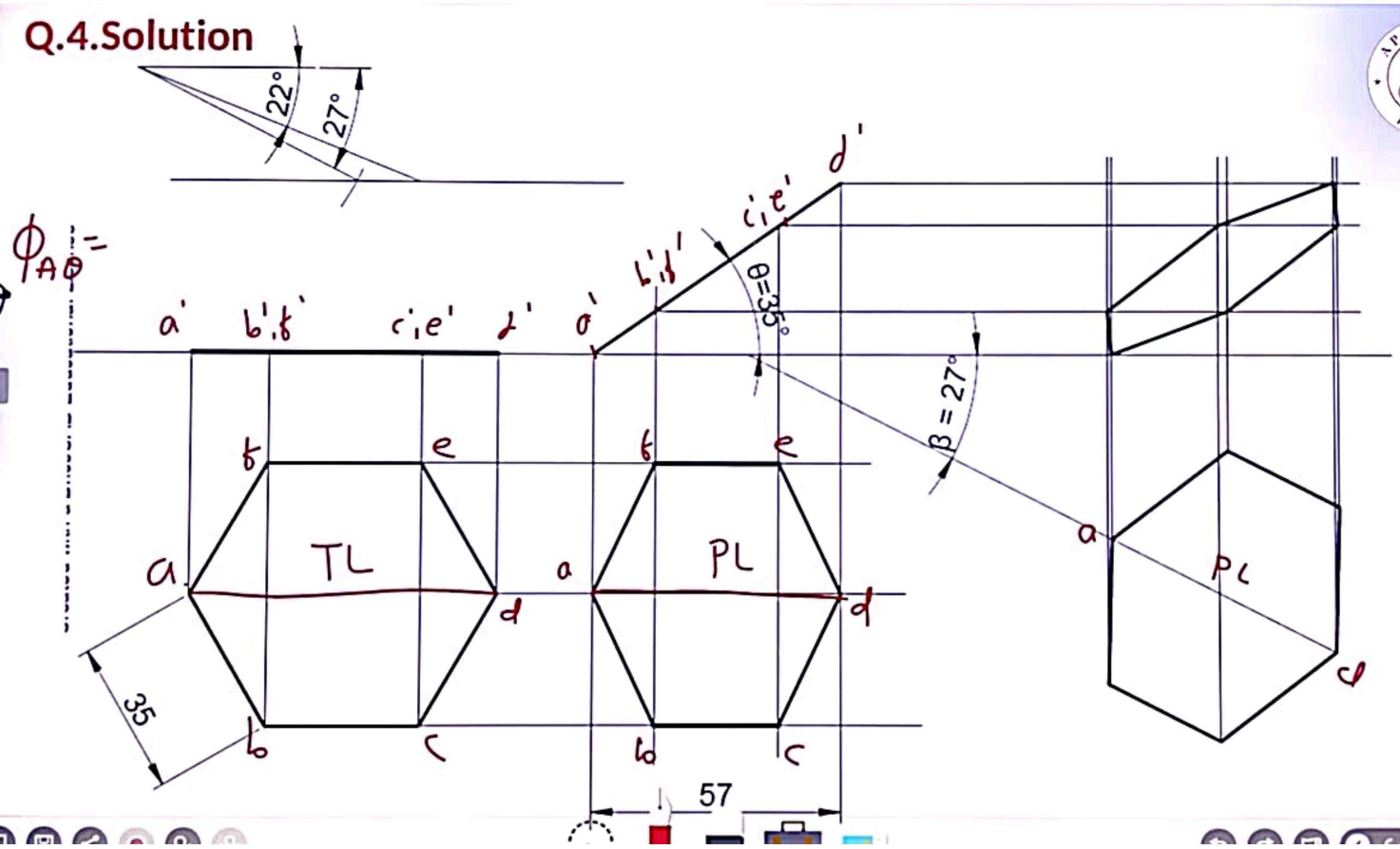
Q.2) MARKING : PLOTING GIVEN DATA (2M) + EL & TL IN FV (4M) + EL & TL IN TV (4M) + DIMENSIONS (1M) + LINEWORK (1M)



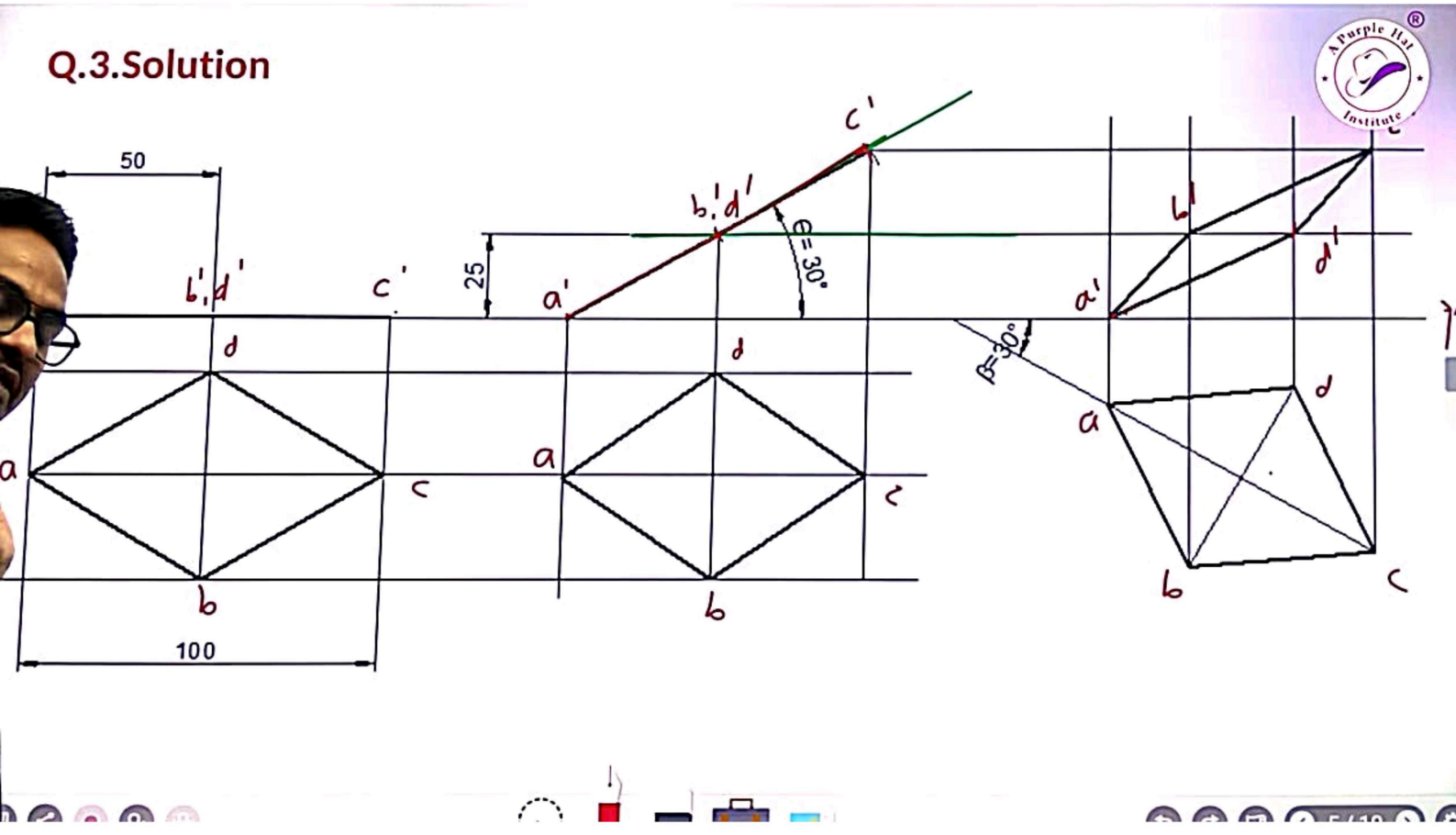
Given Data:
p' = 0 mm
q' = 50 mm
q = 20 mm
EL/FV = 78 mm
Φ = 40



Q.4.Solution


22°
27°
ϕ_{AB} =
a'
b',f'
c',e'
d'
a'
b',f'
c',e'
d'
θ=35°
β = 27°
f
e
f
e
a
TL
a
PL
a
PL
d
d
d
35
b
c
b
c
57

Q.3.Solution

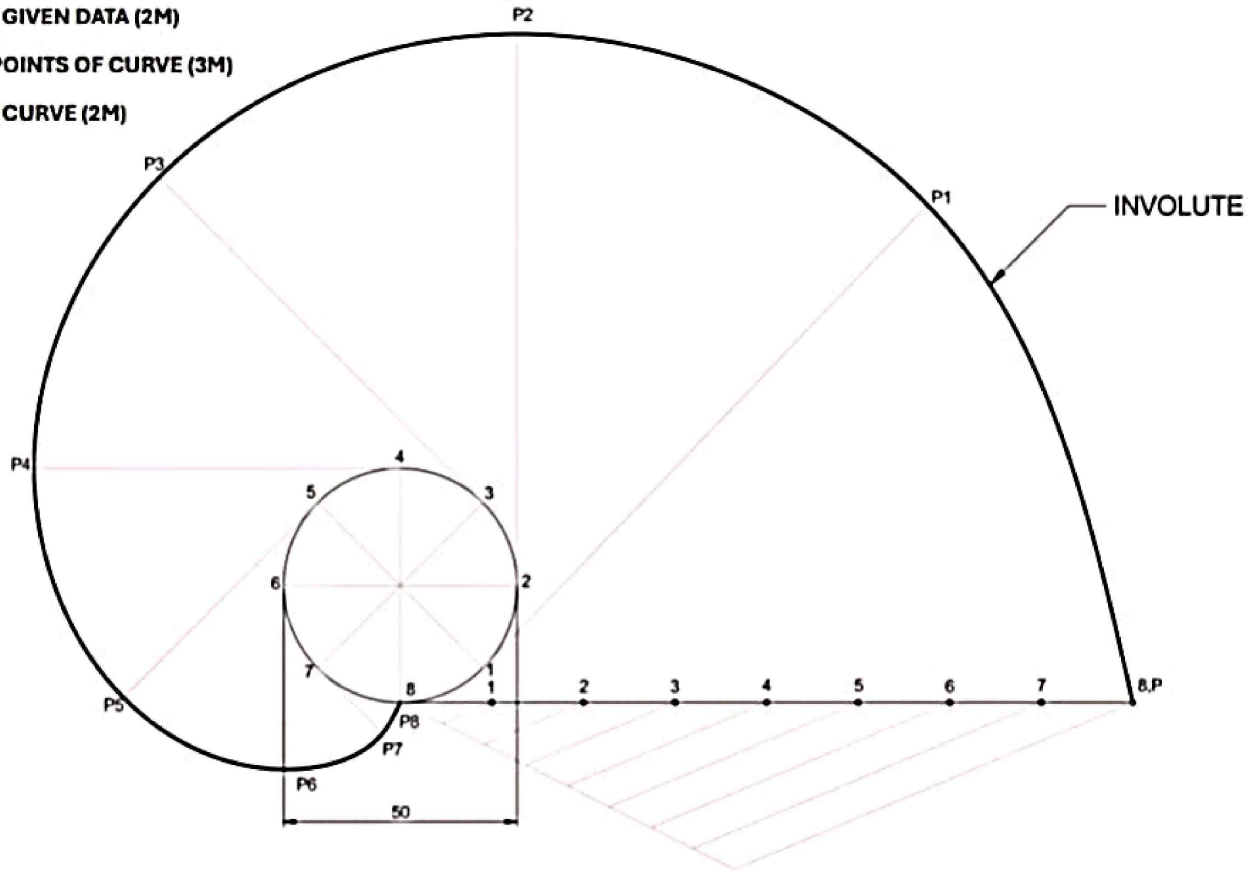


Q.5) a) MARKING:

DRAWING GIVEN DATA (2M)

GETTING POINTS OF CURVE (3M)

DRAWING CURVE (2M)

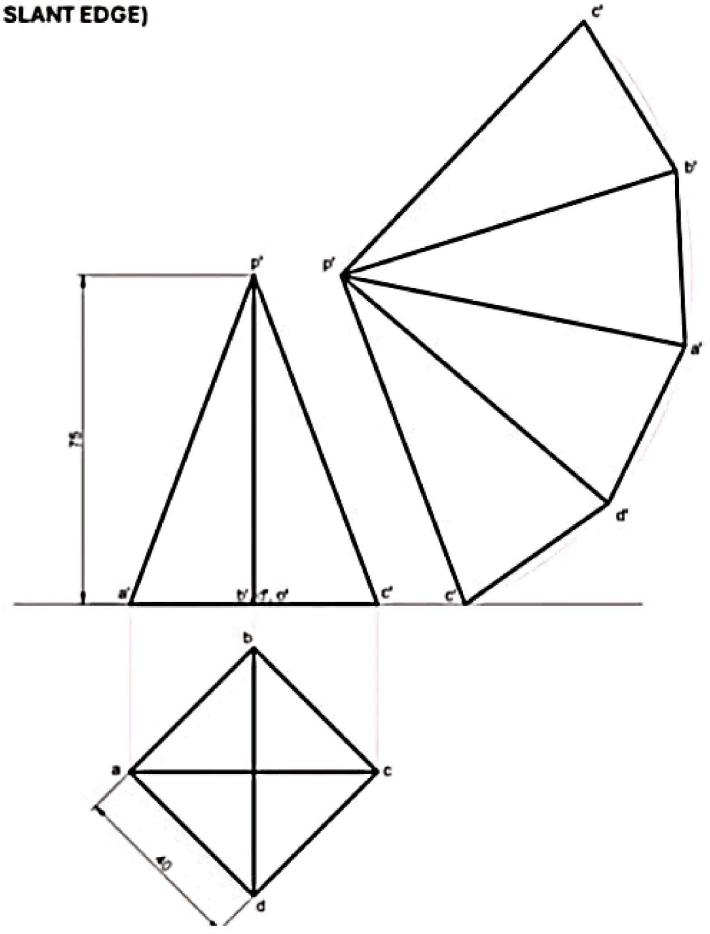


Q.5) b) MARKING: (NOTE : ONLY 3 MARKS FOR STAGE 2, IF CORRECT DEVELOPMENT IS DRAWN & 1ST STEP ORIENTATION OF SQUARE IS WRONG & STUDENTS SOLVED BY ROTATING SLANT EDGE)

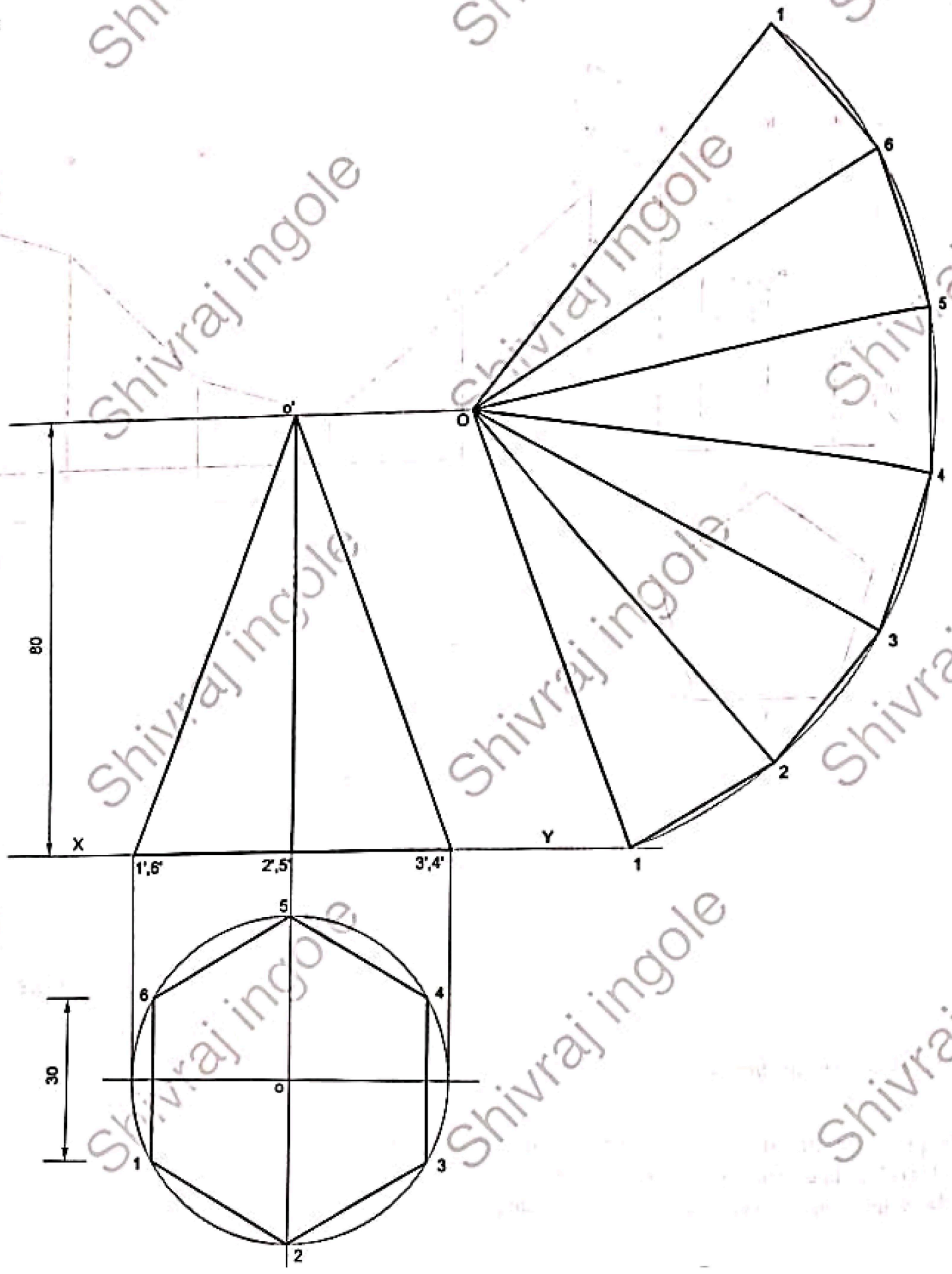
STAGE 1 (3M)

STAGE 2 (3M)

DIM & LINEWORK (1M)



Sol. :



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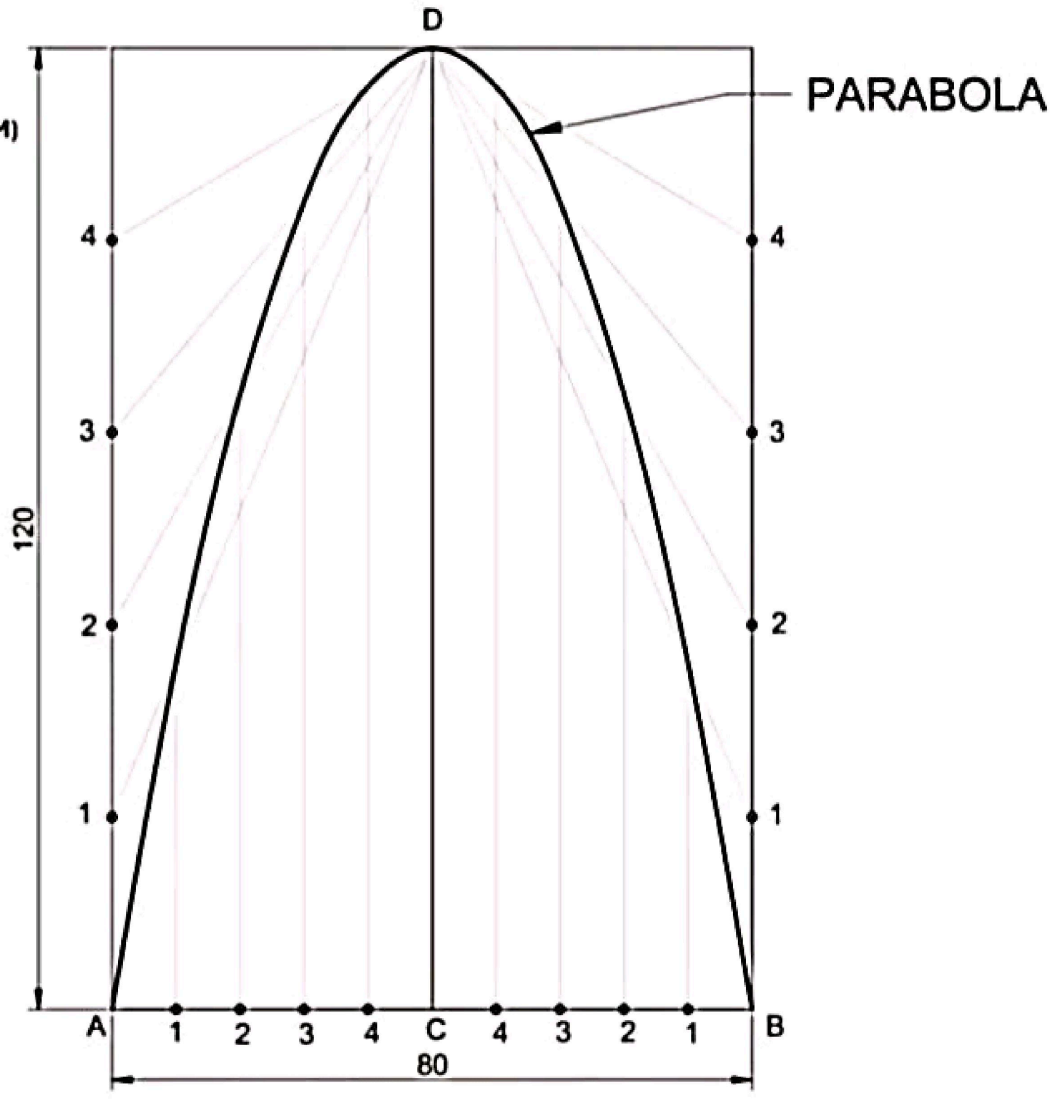
Q.6) a) **MARKING:**

DRAWING GIVEN DATA (2M)

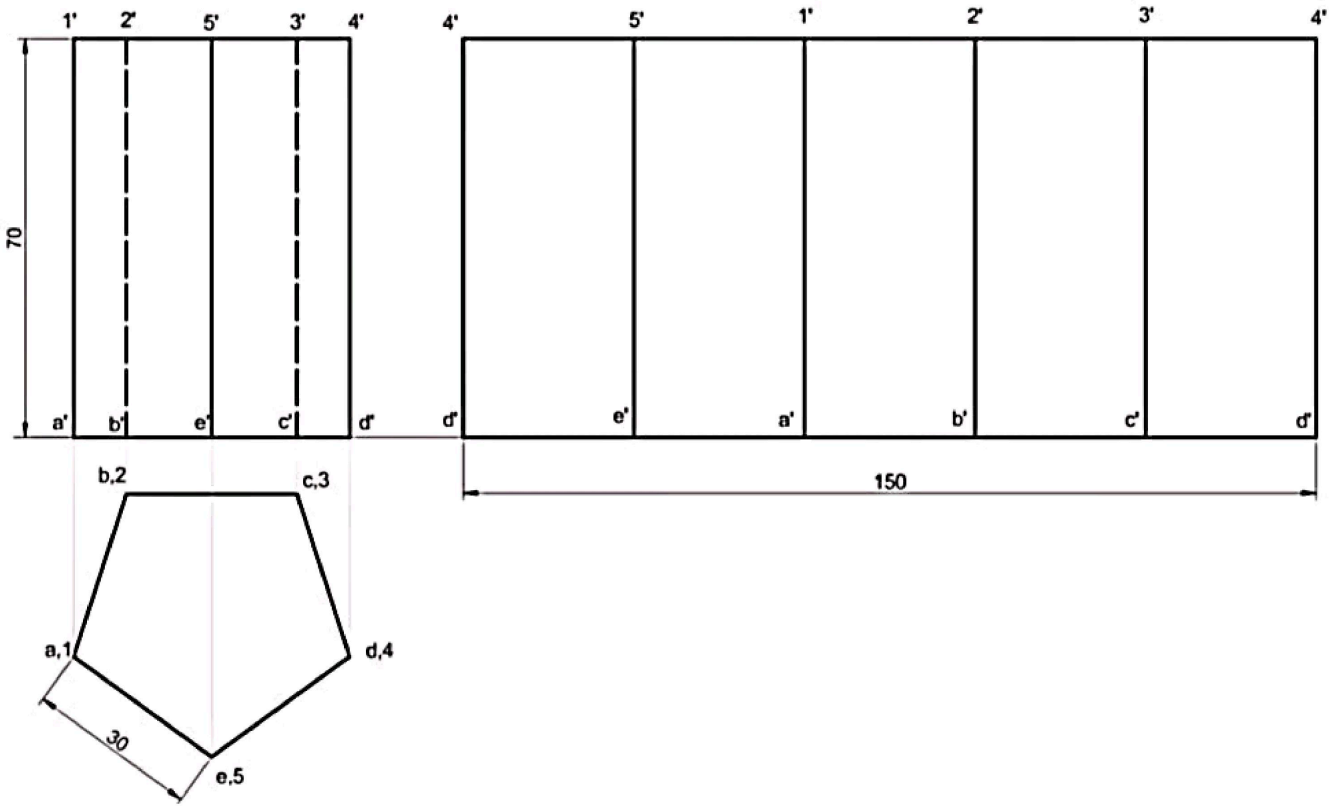
GETTING POINTS OF CURVE (3M)

DRAWING CURVE (2M)



Q. 6) b) MARKING: STAGE 1 (3M) + STAGE 2 (3M) + DIM & LINEWORK (1M)

(NOTE : ONLY 3 MARKS FOR STAGE 2, IF STAGE 1 ORIENTATION IS WRONG)



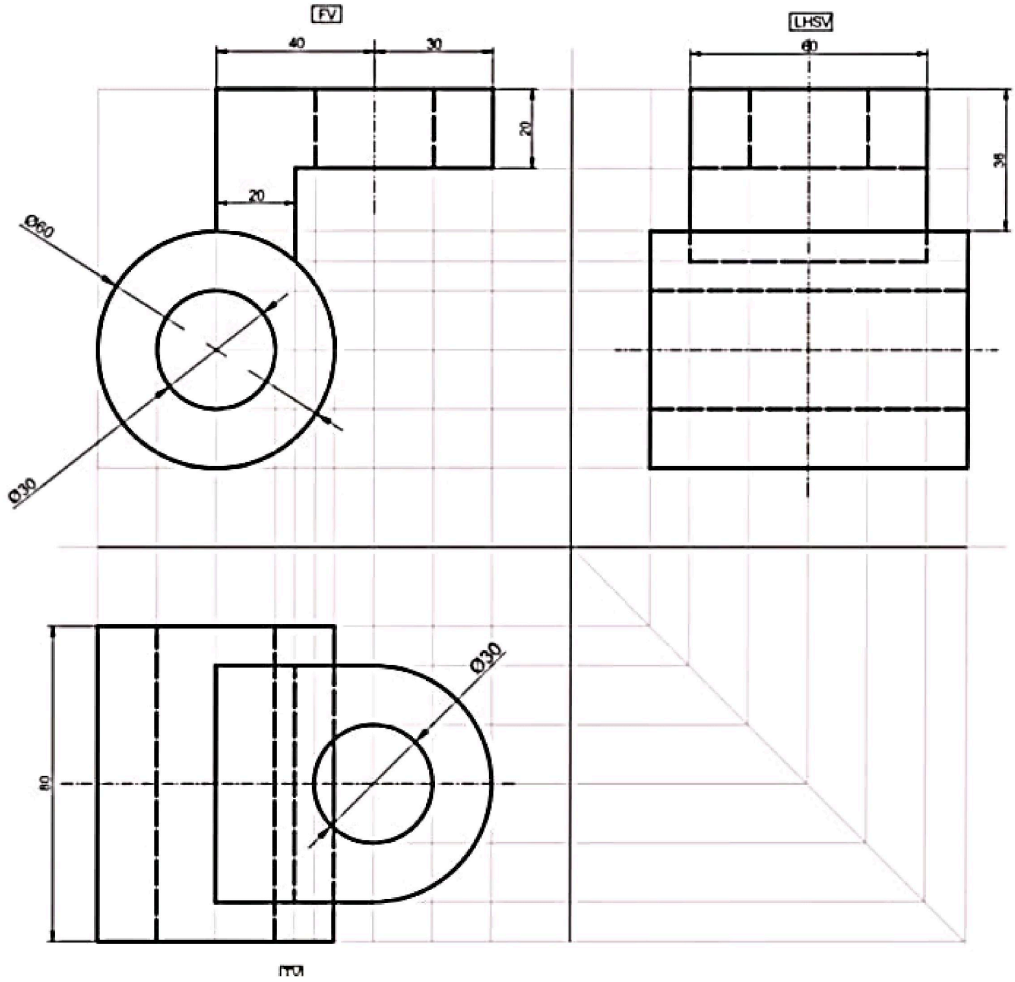
Q.7) **Marking:**

FV (5M)

TV (5M)

LHSV (5M)

DIM (1M)



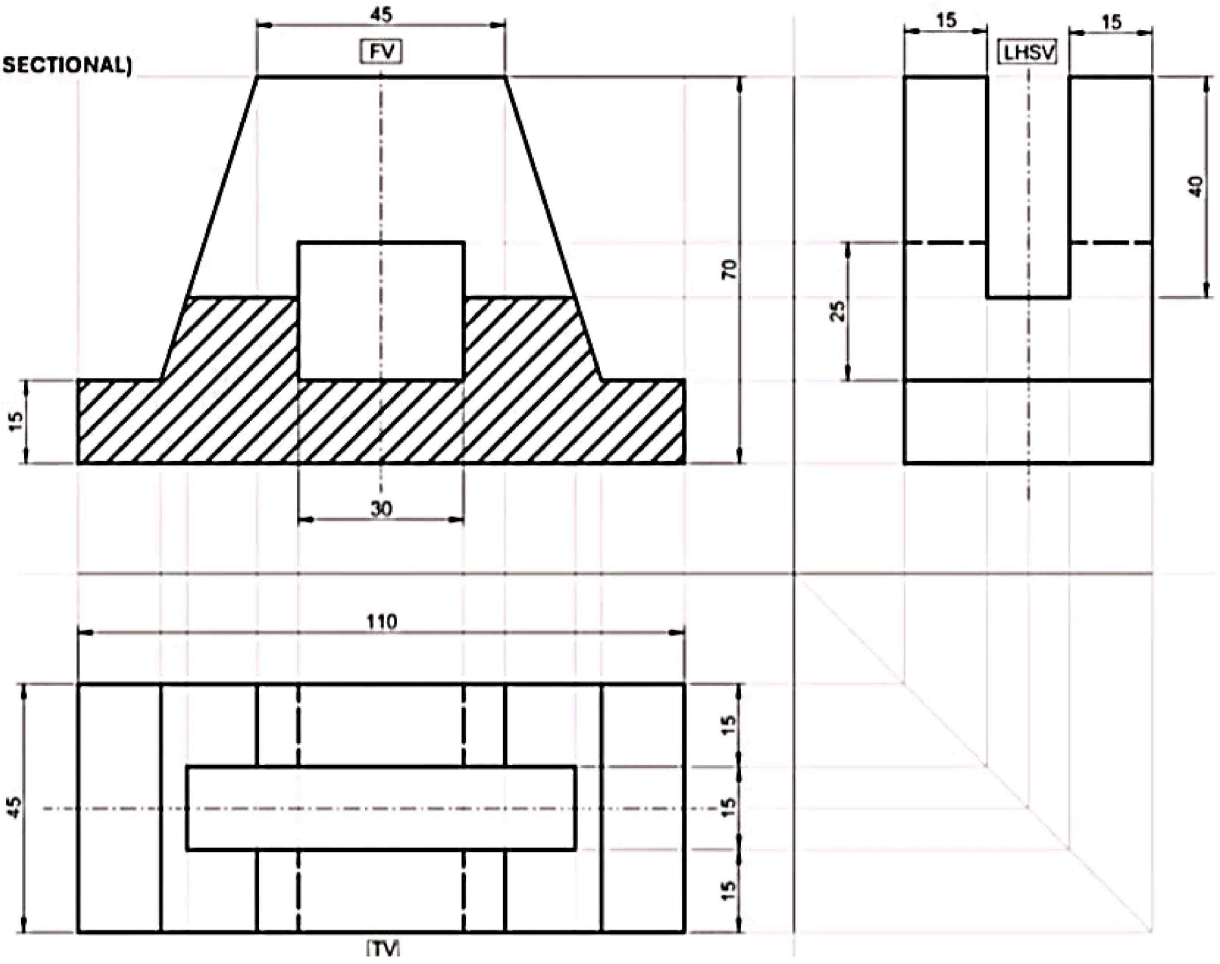
Q.8) Marking:

FV (3M + 2M SECTIONAL)

TV (5M)

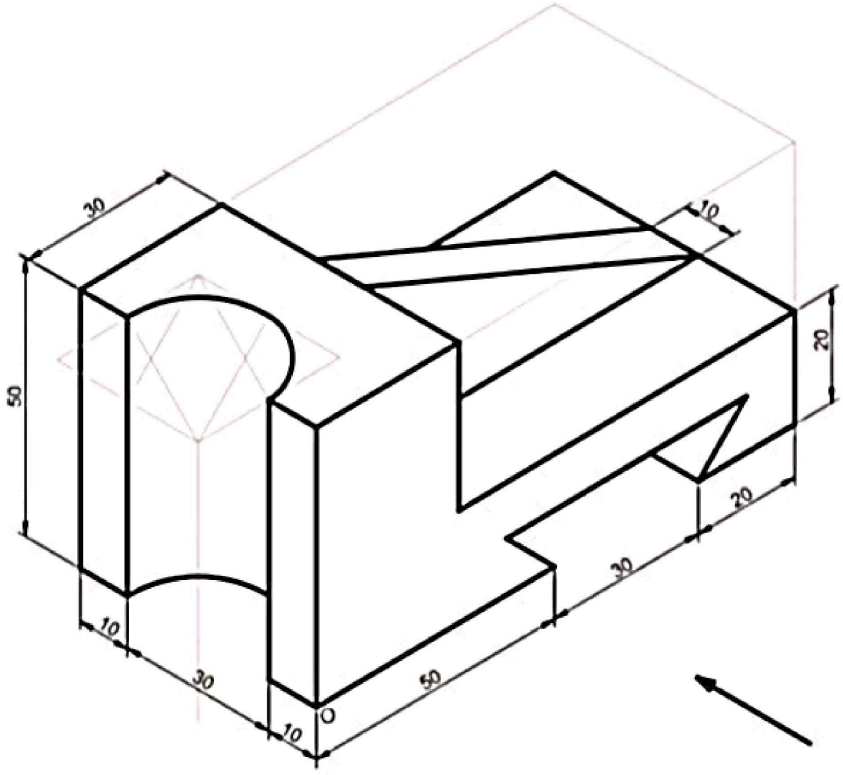
LHSV (5M)

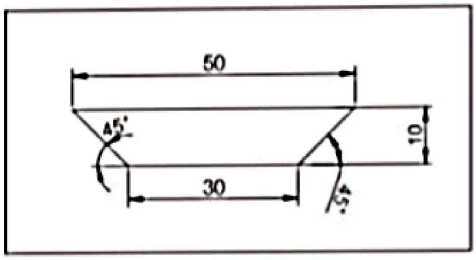
DIM (1M)



Q.9) MARKING: L SHAPE BASE (4M) + RIB (2M) + TOP & BOTTOM SLOT (4M)

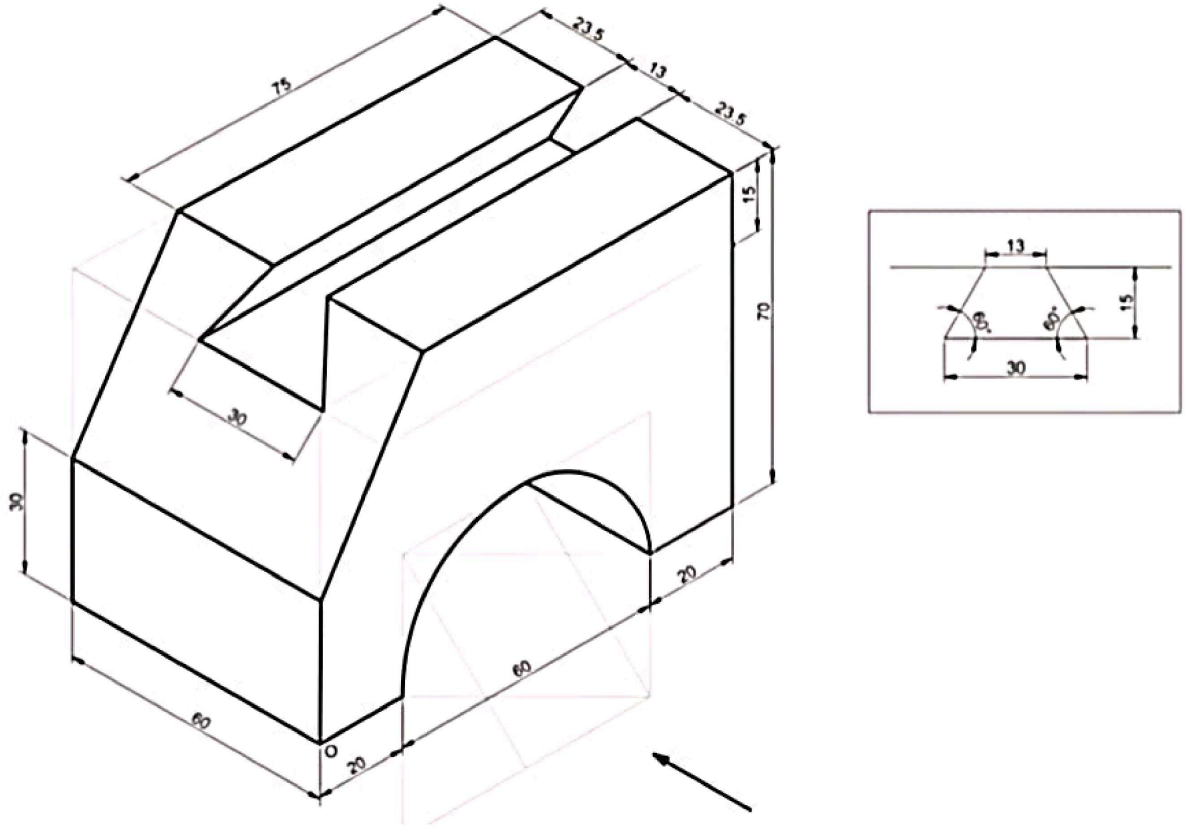
NOTE : IF ORIENTATION OF OBJECT IS WRONG GIVE " 0 " MARKS





Q.10) MARKING: L SHAPE BASE (4M) + RIB (2M) + TOP & BOTTOM CIRCLE (4M) + CUT IN BASE WITH EXTERNAL CONSTRUCTION (5M) + DIM (1M)

NOTE : IF ORIENTATION OF OBJECT IS WRONG GIVE " 0 " MARKS

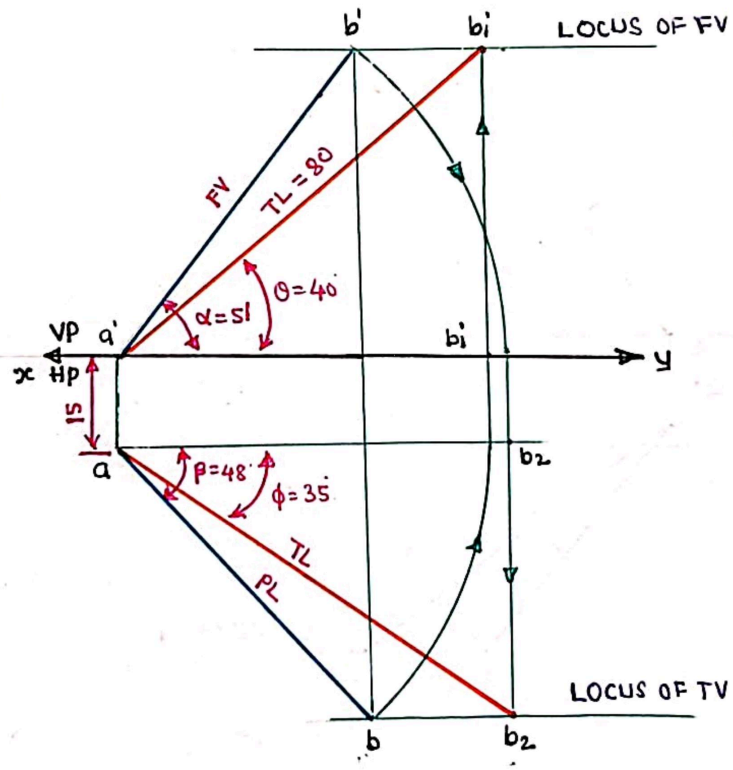


1 A point of line AB is in HP and 15mm in front of VP its front view and Top view makes an angle 51° & 48° with HP & VP respectively. Draw the projection of line AB if its end point B is 51 mm above HP. Find its true length & True inclinations.

SPPU: Dec-17, Nov. 13, 12 Marks

GIVEN DATA

$a' = 0$
$a = 15mm \downarrow$
$\alpha = 51^\circ$
$\beta = 48^\circ$
$b' = 51mm \uparrow$



RESULTS

TL = 80 mm
θ = 40°
ϕ = 35°

9 The point P of line PQ is in HP while its other end Q is 50mm above HP and 80 in front of VP. The line is inclined to VP at an angle of 40°. Draw the projection of a line if its elevation measure 78mm. Find true length of line and inclination made by the with HP.

SPPU: Aug. 23, 12 Marks

GIVEN DATA
$p' = 0$
$q' = 50mm \uparrow$
$q = 80 \downarrow$
$\phi = 40°$
$EL = 78\ mm$
Find. $TL = ?$
$\theta = ?$

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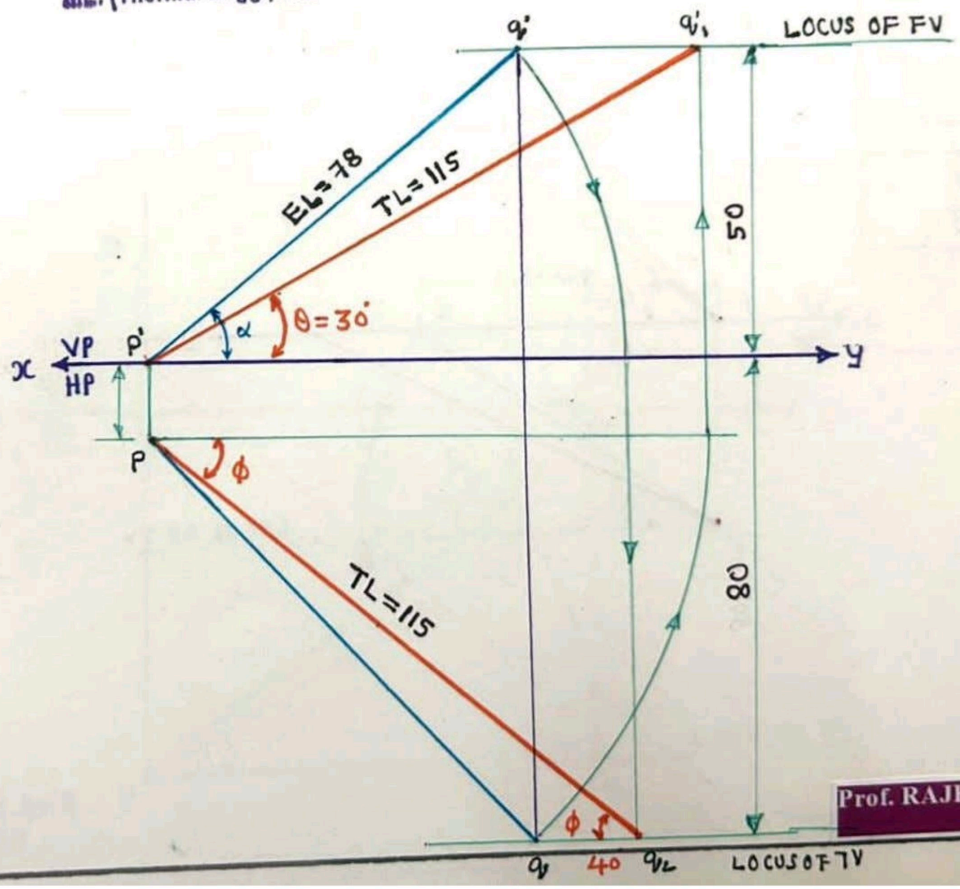
ME. (Thermal Engg.) PhD*



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